OMB Number: 4040-0004 Expiration Date: 8/31/2016

Application for	Federal Assista	ince SF-424				
* 1. Type of Submiss Preapplication Application Changed/Corr	S-605-CM10	⊠ New [* If Revision, select appropriate letter(s): * Other (Specify):			
* 3. Date Received: 12/18/2015		Applicant Identifier:				
5a. Federal Entity Id	lentifier:		5b. Federal Award Identifier:			
State Use Only:						
6. Date Received by	State:	7. State Application le	Identifier:			
8. APPLICANT INF	ORMATION:					
* a. Legal Name:	Metropolitan Go	vernment of Nashville	and Davidson County			
* b. Employer/Taxpa	ayer Identification Nun	nber (EIN/TIN):	* c. Organizational DUNS:			
62-1783187			0782176680000			
d. Address:						
* Street1:	800 Second Ave	enue South				
Street2:	P.O. Box 19630	00				
* City:	Nashville					
County/Parish:	Davidson					
* State:			TN: Tennessee			
Province:						
* Country:	USALLACIA SOLIA SO		USA: UNITED STATES			
* Zip / Postal Code:	37219-6300					
e. Organizational L	Jnit:					
Department Name:			Division Name:			
Planning Depar	tment		Community Plans			
f. Name and contact information of person to be contacted on matters involving this application:						
Prefix: Mr.	0	* First Name:	Gregory			
Middle Name:						
2000000	CTAXCOII .					
Suffix:						
Title: Planner						
Organizational Affiliat	tion:					
* Telephone Number:	615-862-7162		Fax Number:			
*Email: gregory.claxton@nashville.gov						

Application for Federal Assistance SF-424						
* 9. Type of Applicant 1: Select Applicant Type:						
B: County Government						
Type of Applicant 2: Select Applicant Type:						
Type of Applicant 3: Select Applicant Type:						
* Other (specify):						
* 10. Name of Federal Agency:						
Environmental Protection Agency						
11. Catalog of Federal Domestic Assistance Number:						
66.818						
CFDA Title:						
Brownfields Assessment and Cleanup Cooperative Agreements						
* 12. Funding Opportunity Number:						
EPA-OSWER-OBLR-15-04						
* Title:						
FY16 Guidelines for Brownfields Assessment Grants						
13. Competition Identification Number:						
Title:						
14. Areas Affected by Project (Cities, Counties, States, etc.):						
Add Attachment Delete Attachment View Attachment						
Aud Attachment Delete Attachment						
* 15. Descriptive Title of Applicant's Project:						
Nashville brownfields						
Attach supporting documents as specified in agency instructions.						
Add Attachments Delete Attachments View Attachments						

Application for Federal Assistance SF-424						
16. Congress	ional Districts Of:					
* a. Applicant	5			* b. Program/Project	5	
Attach an addit	tional list of Program/Project	Congressional Districts if	needed.		712	
		,	Add Attachment	Delete Attachment	View Attachment	
17. Proposed	Project:					
* a. Start Date:	10/01/2016			* b. End Date:	08/31/2018	
18. Estimated	Funding (\$):					
* a. Federal		400,000.00				7-28-0-0-1
* b. Applicant		0.00				
* c. State		0.00				
* d. Local		0.00				
* e. Other		0.00				
* f. Program In	ncome	0.00				
*g. TOTAL		400,000.00				
* 19. Is Applic	ation Subject to Review E	y State Under Executiv	ve Order 12372 Pro	cess?		
a. This ap	plication was made availal	ole to the State under th	ne Executive Order	12372 Process for revie	ew on	
b. Prograr	m is subject to E.O. 12372	but has not been select	ted by the State for	review.		
C. Prograr	m is not covered by E.O. 1	2372.				
* 20. Is the Ap	plicant Delinquent On An	y Federal Debt? (If "Ye	es," provide explan	ation in attachment.)		
Yes	⊠ No					
If "Yes", provid	de explanation and attach					
Add Attachment Delete Attachment View Attachment						
21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001) ** I AGREE* ** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.						
Authorized Representative:						
Prefix:		* First Na	me: Gregory			
Middle Name:						
*Last Name: Claxton						
Suffix:						
*Title: Planner						
* Telephone Number: 615-862-7162 Fax Number:						
* Email: grego	ory.claxton@nashvill	e.gov				
* Signature of A	uthorized Representative:	Gregory Claxton	•	Date Signed: 12/18/2015	R .	



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

MEGAN BARRY MAYOR OFFICE OF THE MAYOR METROPOLITAN COURTHOUSE NASHVILLE, TENNESSEE 37201 PHONE: (615) 862-6000 EMAIL: mayor@nashville.gov

December 18, 2015

Environmental Protection Agency, Region 4 Attention: Ms. Barbara Alfano Atlanta Federal Center 61 Forsyth Street, S.W. 10th Floor Atlanta, GA 30303-8960

Dear Ms. Alfano:

- a. Applicant identification: The Metropolitan Government of Nashville-Davidson County in the State of Tennessee is applying for an EPA Brownfields Assessment Grant.
- b. Applicant DUNS number: 0782176680000
- c. Funding requested:
 - i. Grant Type: Assessment, Community-wide
 - Federal Funds Requested: Metro Nashville is requesting a total Assessment Grant of \$400,000.
 - iii. Contamination: Both (\$200,000 for Hazardous Substances and \$200,000 for Petroleum)
- d. **Location:** Metro Nashville, a combined city-county government in Middle Tennessee, is the area of assessment for this grant. Satellite cities within Davidson County are not included in the grant.
- e. **Property information:** Not applicable: This proposal is for a Community-Wide Assessment Grant; specific property information will be identified through the funded process.
- f. Contacts:
 - a. Project Director: Gregory Claxton, Metro Planning Department, will serve as the Project Director for this proposal. Mr. Claxton can be contacted at 800 Second Avenue South, Nashville, TN 37219 | 615-862-7162 | gregory.claxton@nashville.gov
 - b. Chief Executive: Mayor Megan Barry is the Chief Executive for Metro Nashville. Her contact information is: One Public Square, Suite 100, Nashville, TN 37201 | 615-862-6008 | megan.barry@nashville.gov
- g. Date submitted: This proposal was submitted on December 18, 2015, through grants.gov.
- h. **Project Period:** The proposed project will last two years, allowing room for adjustments to fit within the three-year requirement.

Environmental Protection Agency, Region 4

Attention: Ms. Barbara Alfano

Page Two

December 18, 2015

i. Population:

- In 2014, Metro Nashville & Davidson County had an estimated 644,008 residents (American Community Survey, 2014, 1-year estimate).
- ii. Metro Nashville Davidson County is a municipal government; this section does not apply.
- Regional priorities/other factors: See the attached checklist.

Thank you for your consideration of this proposal.

Sincerely,

Megan Barry

Mayor

Metropolitan Government of Nashville & Davidson County

Appendix 3 Regional Priorities Form/Other Factors Checklist

Name of Applicant: Nashville brownfields

Regional Priorities Other Factor

If your proposed Brownfields Assessment project will advance the regional priority(ies) identified in Section I.E, please indicate the regional priority(ies) and the page number(s) for where the information can be found within your 15-page narrative. Only address the priority(ies) for the region in which your project is located. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal, it will not be considered during the selection process.

Regional Priority Title(s):	
No Regional priorities identified	
Page Number(s):	

Assessment Other Factors Checklist

Please identify (with an x) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Other Factor	Page #
None of the Other Factors are applicable.	
Community population is 10,000 or less.	
Applicant is, or will assist, a federally recognized Indian tribe or United States territory.	
Targeted brownfield sites are impacted by mine-scarred land.	
Project is primarily focusing on Phase II assessments.	
Applicant demonstrates firm leveraging commitments for facilitating brownfield project completion by identifying amounts and contributors of funding in the proposal and have included documentation.	
Recent (2008 or later) significant economic disruption has occurred within community, resulting in a significant percentage loss of community jobs and tax base.	

Applicant is one of the 24 recipients, or a core partner/implementation strategy	
party, of a "manufacturing community" designation provided by the Economic	
Development Administration (EDA) under the Investing in Manufacturing	
Communities Partnership (IMCP). To be considered, applicants must clearly	
demonstrate in the proposal the nexus between their IMCP designation and	
the Brownfield activities. Additionally, applicants must attach	
documentation which demonstrate either designation as one of the 24	
recipients, or relevant pages from a recipient's IMCP proposal which	
lists/describes the core partners and implementation strategy parties.	
Applicant is a recipient or a core partner of HUD-DOT-EPA Partnership for	
Sustainable Communities (PSC) grant funding or technical assistance that is	
directly tied to the proposed Brownfields project, and can demonstrate that	
funding from a PSC grant/technical assistance has or will benefit the project	
area. Examples of PSC grant or technical assistance include a HUD Regional	
Planning or Challenge grant, DOT Transportation Investment Generating	
Economic Recovery (TIGER), or EPA Smart Growth Implementation or	
Building Blocks Assistance, etc. To be considered, applicant must attach	
documentation.	
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

Community need

Targeted community description

Nashville is a booming Southern city, grappling with unprecedented levels of infill development. The combined city-county represented by the Metropolitan Government of Nashville & Davidson County is home to 644,000 residents and 540,000 jobs. Spanning 500 square miles, Nashville reaches from its dense downtown—home to honky tonks, professional football, hockey, and baseball stadiums, and the State Capitol—through historic urban neighborhoods and mid-century suburban communities to rural farms

The infill boom has so far focused on Nashville's urban core, rapidly escalating property values and driving community concerns related to gentrification, community character, affordability, historic preservation, and what it means to be Nashville. Meanwhile, some suburbs within Davidson County are struggling with declining commercial areas and soft property values. Brownfields are a critical component to developing equitably in both locations: high-demand urban neighborhoods and lower demand suburban neighborhoods.

Nashville's recently revised General Plan (NashvilleNext, adopted in June 2015) identified retrofitting suburban locations as a key strategy to manage both sides of these changes. Nashville's Community Health Improvement Plan (2014–19) identifies the health of the built and natural environments as a key public health priority.

Nashville's brownfields include old industrial sites along railroad spurs as well as late twentieth century auto-oriented uses, strip commercial, and dispersed industrial centers. Despite this, Metro Nashville does not have an active brownfields program. While the city has had success with individual brownfields projects, it does not have a compre-hensive and coordinated process to deal with its diverse, geographically dispersed sites. In Nashville's urban core, overwhelming demand is powering private developers' ability to manage contaminated sites. The increased cost of development results in increased housing costs, furthering gentrification.

However, in Nashville's older suburban communities (within Davidson County and part of the Metropolitan Government), uncertainty about contamination and remediation costs, combined with lower demand and property values, may bar redevelopment. This prevents investment from spreading more evenly throughout the county. A comprehensive brownfields program is critical to NashvilleNext's strategy of spurring the creation of walkable, mixed income centers aligned with high-capacity transit throughout the county.

Demographic information

Davidson County is a large, diverse community. It reaches from downtown (the economic and cultural center of Middle Tennessee) to rural fringes. It includes pockets of concentrated poverty, gentrifying neighborhoods that displace long-time residents, stable suburban communities, and declining suburban communities. As Nashville grows, it is also experiencing a demographic inversion, as higher income households seek walkable, amenity-rich neighborhoods in the urban core, while lower income households move outward, seeking lower housing costs or proximity to lower wage jobs, which are also suburbanizing.

For many cities, older suburbs are separate jurisdictions. While the center city rises, inner ring suburbs decline. Because Nashville is a joint city-county government, Metro Government serves both kinds of places: gentrifying urban neighborhoods and declining suburban ones. Nashville's new General Plan takes advantage of this by developing a countywide growth plan to balance growth in the urban core with investments in suburban areas.

Table 1 shows demographics in Nashville compared with Tennessee and the U.S. It also includes two example communities (one urban community adjacent to downtown and one suburban community in the northeast part of the county) with potentially contaminated sites. Nashville has a growing population and compares favorably to the State and country on unemployment. However, it still has the highest rate of poverty in the region and the highest concentration of minority residents. And while its average income is higher than the rest of the state, individual communities' average income is quite low and substantially lagging in income growth.

Data from the American Community Survey shows the changes that are beginning to happen. (Note, however, that the 5-year estimates needed to describe Census tracts create a lag compared to the rapid pace of change in Nashville and include years affected by the 2008 recession.) Both example communities show a dramatic increase in poverty. The urban community shows slower growth in its minority population, while the suburban community shows much faster growth. Finally, incomes in both communities lag, though the suburban community shows the slowest growth.

Table 1	Example urban community ²	Example suburban community ³	Nashville- Davidson County ⁴	State of Tennessee	National
Population ¹	9,049	18,402	614,908	6,402,387	311,536,594
UnemploymentJune 2015 ⁵ 2009-2013 ¹	18.1%	7.5%	4.9% 8.9%	5.7% 10.1%	5.3% 9.6%
Poverty rate ¹ Change since 2000 ¹	37.8% +9.9%	26.4% +12.5%	18.9% +5.6%	17.6% +4.2%	15.4% +3.0%
Percent minority ¹ Change since 2000 ¹	87.0% +3.7%	47.1% +19.7%	43.6% +7.6%	24.7% +3.9%	36.7% +5.8%
Median income ¹	\$12,700 – \$21,900	\$26,400 \$42,600	\$46,700	\$44,300	\$53,000
Per capita income ¹ Change since 2000 ¹	\$13,815 +\$1,778	\$19,096 +\$427	\$27,356 +\$5,338	\$24,409 +\$5,016	\$28,155 +\$6,568

- Contemporary data is from the American Community Survey, 2009-2013, 5-year estimate. 2000 data is from U.S. Census 2000.
- Wedgewood-Houston and Cameron Trimble neighborhoods south of Nashville's downtown. Census Tracts 137, 160, 161
- 3 Madison in northeast Nashville. Census tracts 104.02, 107.01, 108.01, 108.02
- 4 Metro Nashville-Davidson County (balance), not including satellite cities with a separate government.

Description of brownfields

Potential brownfields are dispersed throughout Nashville's 500 square miles. This project will consider key concentrations of brownfields on (1) land zoned for industrial activity with a future land use policy that does not allow industrial and (2) intense commercial districts. These are locations are likely to be contaminated from industrial activity, auto-oriented uses, and dry cleaners. Sites intended to remain as industrial in the future are not a focus of this project.

From 2009 to 2013, the EPA identified releases of 11,573 pounds of persistent, bioaccumulative, and toxic chemicals in Nashville (EPA Toxic Release Inventory). These do not represent exposure to pollutants, but does indicate part of the risk of exposure.

Brownfields' proximity to target community: Potential brownfields stretch into most parts of Davidson County. Within Nashville's urban core, many brownfield sites, including industrial properties, are intermingled with residential areas. In suburban areas, brownfield sites are often separately from residences, but contribute to a perception of blight providing underused lots and unwanted uses that limited redevelopment. In both cases, brownfields will be targeted that the community has already expressed a desire to convert to another use. Reflecting the different challenges posed by Nashville's urban and suburban markets, this program will focus on one urban cluster of brownfields and multiple suburban clusters of brownfields.

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Agriculture, Battery recycling and disposal, Dry cleaning, Gasoline stations, Hospitals, Machine shops and metal fabrication, Metal plating and finishing, Metal recycling and auto salvage, Painting/auto body repair, Printing and ink manufacturing, Railroad yards, Underground storage tanks, Vehicle maintenance

Contaminants at typical sites

Halogenated VOCs Nonhalogenated VOCs

Fuels

Halogenated SVOCs Nonhalogenated SVOCs

Metals and metalloids

Cumulative environmental issues

Throughout the county, Nashvillians face multiple environmental, health, and economic issues. Most pressing is the mismatch between affordable housing, transit service, walkable neighborhoods, jobs, and services. This mismatch exacerbates health and quality of life issues. Low and moderate income residents are often forced to choose between a home they can afford, access to higher quality schools, or ease of access to work or transit. The result includes households burdened by the cost of housing and transportation, overcrowding, and long commutes.

18.5% of Nashvillians experience severe housing problems, such as lack of access to a kitchen or plumbing or overcrowding (County Health Rankings, accessed at www.countyhealthrankings.org April 2015; 50% of renters spend more than 30% of their income on rent (American Community Survey, 2009-2013). Each of these has distinct health and welfare impacts, such as increased susceptibility to infectious diseases, food insecurity, or exposure to mold, pest infestations, lead, and other environmental hazards.

Partly as a result, many Nashvillians are not physically active (in 2010, only 61% were); 58% are

overweight or obese. These can lead to health problems including diabetes (8% of Davidson residents), heart disease, strokes, and cancer. (Behavioral Risk Factor Surveillance Survey, 2011)

Impacts on target communities

Brownfields cause direct health problems. In 2003, Metro Public Health conducted a study of one large dry cleaning operation, based in part on community concerns related to a perceived cancer and Alzheimers cluster. The site, in Nashville's urban core, was found to have significantly high levels of perchloroethylene (PCE, perc) and its degradation products (trichloroethylene, cis-1, 2-dichloroethylene, vinyl chloride) in the soil and groundwater, with migration northwest of the dry cleaning operations. Pollutant levels in the surrounding soil and groundwater were above regulatory levels, exposing the surrounding community to the pollutants. At the time, more than 18,000 residents lived within 1 mile of the site, including residents in public housing, 1,300 children under 10 and 1,800 people over 60.

Following the study, the site of the dry cleaning operation was remediated and redeveloped as a neighborhood commercial center. Reinvestment has coincided with gentrification pressures. Many early uses (such as a café, restaurants, galleries, and high-end retail) encouraged gentrification; the neighborhood began appearing in discussions of "hot" neighborhoods. More recently, many of those early uses have themselves been priced out of the shopping center in favor of even higher-end retail.

In this way, recovering brownfields make Nashville's community inversion worse. Brownfields in high demand urban areas are being remediated by the private market, because the current market for high-end housing and commercial space can absorb those costs. However, one effect is that mid-market housing is not being added. Furthermore, much of the remaining affordable housing in Nashville's urban neighborhoods is close to brownfields, concentrating and thus disproportionately affecting Nashville's disadvantaged communities close to health risks.

Metro Nashville is currently developing stronger tools for developing and preserving affordable housing, including an inclusionary housing policy. Once adopted, these tools should coordinate with brownfield efforts to ensure that public money spent to bring brownfields to market support mixed income housing in high demand locations. They should also serve to ensure that remediating brownfields supports equitable development and reduces displacement of existing residents as their neighborhoods become more desirable.

On the other hand, brownfields in lower demand suburban neighborhoods, which are increasingly home to Nashville's low income households and minority residents, inhibit any development at all. Low demand in these areas means that the risk of finding a high cost to redevelop brownfields and greyfields deters new investment. Quantifying the level of contamination can make these properties attractive for private development, spurring new investments in underserved communities.

Financial need

Economic conditions

Even in boom times, Nashville has financial challenges, with no state income tax and a small sales tax primarily devoted to schools. Property taxes are the primary source of revenue for the city and must cover public services spread over a large area. Industry in middle Tennessee is suburbanizing to counties surrounding Nashville, seeking larger sites with lower land costs. Let behind are numerous old industrial sites, intermingled with long-time commercial uses, including auto shops. Identifying lower cost opportunities to redevelop in line with Nashville's countywide growth and preservation strategy is critical. However, no part of Metro Government currently has the expertise to initiate a program like this. Developing a new program requires outside support to define it and attain buy-in from the community and Metro leadership, particularly when the program does not have a natural home within Metro Government.

Economic effect

Brownfields make it more difficult to redevelop property by introducing uncertainty about the cost of cleanup. In urban areas, this encourages gentrification by raising the cost of new housing. Additionally, housing most closely mixed with industrial areas redevelops mores lowly than housing further from industrial areas and becomes a de facto source of affordable housing. As the urban neighborhoods least exposed to contamination gentrify first, lower income households concentrate in the areas most exposed to contamination.

Bringing brownfields back to the market increases the tax base and provides opportunities for more valuable commercial space and for additional homes. Moreover, connecting a brownfields program to Nashville's inclusionary housing program (in development now) gives existing residents greater opportunity to benefit from an equitable approach to new investment. This gives lower income households greater access to Nashville's job- and transitrich urban core.

Brownfields in suburban areas, however, encourage blight and disinvestment. This pushes new development into the remaining greenfield sites in the county. However, converting greenfield sites to industrial or greyfield worsens other environmental problems, such as flooding (a major concern in Nashville since 2010's disastrous flood). Additionally, most remaining greenfield sites are located away from existing transit and services. Key to NashvilleNext's strategy for improving livability in Nashville is locating new development along transit service in walkable settings. Recovering these sites will retrofit suburban areas to support walkability and help balance demand between urban and suburban neighborhoods.

Project description and feasibility of success

Project description

The strategy recommended by Nashville's General Plan for improving quality of life throughout the county is to balance demand in urban and appropriate suburban locations by focusing growth into a series of centers and corridors connected by transit. In high demand urban

neighborhoods, it seeks to incorporate affordable units as redevelopment happens. In low demand suburban neighborhoods, it seeks to retrofit outdated industrial and commercial areas by investing in public spaces, transit, and public services to spur demand and private investment.

Nashville's robust community planning program has created land use and community character recommendations for every property in the county. Nashville's 14 community plans were initiated in 1991 and have each been updated three to five times. Most recently, all fourteen were updated as part of the update to Nashville's General Plan, adopted in June 2015. The community character policies represent the community's vision for how properties should change or be maintained into the future. These will be used at the start of the program to identify brownfields important to managing change. They will also be used at the end of the process to focus discussions over the analysis of cleanup alternatives.

Program design: This project supports Nashville's broader strategy by preparing the Metro Planning Department to establish on ongoing brownfields program. Metro Departments, Metro leaders, community leaders, businesses, and property owners will step through a geographic assessment of potential brownfield locations. Geographic clusters of potential brownfield sites will be prioritized to identify areas for assessment. A Brownfields Task Force will identify priority clusters to investigate, and then engage property owners and surrounding communities to select sites with interested owners. Metro will host at least three rounds of community engagement. Each will be built around community meetings, but supplemented with enhanced outreach to vulnerable and disadvantaged communities. The three rounds of engagement will occur between each step in the assessment process.

As estimated 22 properties will receive Phase I assessments, pulling from across the geographic clusters. Metro staff will develop a summary report on all Phase I assessments and host community meetings to review the results and seek input on priorities for Phase II assessments.

The Brownfields Task Force will select an estimated 8 sites for Phase II assessments. Following the Phase II assessments, Metro staff will develop a summary report and host community meetings to discuss implications for the current intended community character.

Program strategies

- 1. Community Plans & Concept Map help identify areas to remain industrial or that are intended to transition to non-industrial/mixed use
- 2. Create professional quality brownfields educational materials, to serve beyond the life of the assessment grant.
- 3. Establish a countywide Brownfields Task Force at the start of the project and add local voices as geographic clusters are identified and included in this grant's scope of work.
- 4. Use community engagement activities to report on the prior step and set priorities for the next step.
- 5. Use Nashville's current Community Plans as the basis of the community's vision for use of brownfield sites. However, the results of Phase II assessments (and any included analysis of brownfield cleanup alternatives) should be used to update the Community Plans to align with recommendations.

Timing

The project will take two years, giving time to complete within the three-year grant window.

Project initiation is expected to take 8 months, and include hiring a project manager, establishing an internal Metro team and Brownfields Task Force, hiring the Licensed Environmental Professionals, development and approval of the Generic QAPP, and initial GIS modeling of potential brownfield clusters.

Site selection and initial outreach is expected to last five months and will include development of the project website, creation of educational materials to introduce community members and property owners to brownfields, and host information sessions in potentially affected communities. The Brownfields Task Force will select focus clusters and priority and alternate sites for testing. Vulnerable communities near the clusters will be identified and an outreach effort designed to engage them in the process, with a focus on their particular neighborhood conditions. The particular outreach tools identified for each community will be used throughout each subsequent round of community engagement.

Phase I assessments are anticipated to take three months, including time for community discussion. Following completion of the assessments, a summary report will be prepared and presented to the community to discuss priorities for sites to receive Phase II assessments.

Phase II assessments include three months for site-specific QAPPs and two months for the assessments themselves. During that time, educational materials will be prepared to inform property owners with contaminated sites of their options for bringing their sites back to economically viable use. A draft report on Phase II findings will inform further community discussion on how the assessed sites can be used in the future. This will include seeing how well suited the sites are for their future community character designation (from the Community Plans adopted in 2015 as part of NashvilleNext) and identifying any changes to the future character designations that are needed. Finally, Planning staff will develop recommendations for establishing an ongoing brownfields program within Metro government.

Site selection

Sites will be selected through a process of expanding understanding of potential contamination and community feedback. An initial simple GIS model will identify clusters of likely brownfields. Nashville's Community Plans and Growth & Preservation Concept Map (parts of its General Plan) will help identify areas to remain industrial (not included for this project) or that are intended to transition to non-industrial/mixed use (this project's focus). One cluster of urban sites will be selected, to identify issues in bringing brownfields to market in a manner that better supports equitable development for existing residents. The remaining clusters will be in lower demand suburban locations, where the cost of remediation prohibits any redevelopment.

Staff will make a preliminary assessment of the characteristics of each cluster (such as the nature of potential contamination or presence of vulnerable communities). The Brownfields Task Force will give priority to clusters. Staff will begin hosting information sessions with community members and property owners to identify receptive communities and owners. The Brownfields Task Force will identify recommended and alternate sites for Phase I analyses. Meanwhile, Planning staff will recruit additional Task Force members from each cluster with

selected sites.

Following the Phase I assessments, community discussion will provide guidance to the Brownfields Task Force in selecting sites to receive Phase II assessments. Sites to receive Phase II assessments and analyses of cleanup alternatives will also be selected to balancing spending between hazardous and petroleum sites.

Task descriptions

Except for tasks carried out by Licensed Environmental Professionals, each task will include work by the grant-funded project manager and Metro staff. To simplify, tasks that show grantfunding for the project manager include unfunded support and oversight by Metro staff. Tasks that are shown as primarily conducted by Metro staff will include coordination with the project manager.

Task 1: Project Initiation

\$30,652

Hire project manager (PM) and form Brownfields Task Force (BTF) During Project Initiation, the PM will lead the formation of the Brownfields Task Force and

oversee creation and documentation of the Brownfields GIS model.

Hire Licensed Environmental Professionals (LEPs) Metro

Metro will seek to contract with 1 to 3 LEPs to conduct site assessments through the life of the grant. During Project Initiation, the LEPs will prepare and receive approval for a joint generic Quality Assurance Project Plan. The LEPs will also review and comment on the Brownfields GIS model.

Metro **Develop Brownfields GIS model**

With oversight from the Project Manager, Planning staff will develop a Brownfields GIS model, which will be used to identify potential brownfield clusters, from which sites to be assessed will be identified. The model will be based on existing or readily available data, such as current or prior zoning, land uses, code citations, community character policy, historical records, and health data.

Task 2: Site Selection

\$32,566 Project development

PM and project team will launch and maintain a project website, to be used through the life of the project. The website will host project materials, updates, and reports, as well as other material relevant to building public understanding about the character and reuse of brownfields. The first round of educational materials will be professional-quality materials explaining for community members and property owners what brownfields are, why they pose health and economic problems, and how they can be re-used. The materials will be made for this project, but can be reused in future brownfields assessments.

Included Host information sessions above

Information sessions will be hosted close to the geographic clusters identified by the Brownfields GIS model. The purpose of these sessions is to educate the public and property owners, discuss potential nearby brownfields, and gather local knowledge about the potential brownfields. The information sessions will also be used to recruit interested property owners.

Included

Select preferred and alternate sites

above

The Brownfields Task Force will prioritize geographic clusters and then select preferred and alternate sites within them to receive Phase I assessments. Sites will reflect geographic diversity, suburban and urban context, affected populations, and hazardous/petroleum contamination. Planning staff will work with owners of the preferred and alternate sites to finalize access agreements.

Included

Identify vulnerable populations and strategies to engage them

above

Metro and the Outreach Consultant will jointly identify vulnerable populations potentially affected by the selected sites, and develop outreach strategies to engage them in the process.

Task 3: Phase I Assessments

\$66,000

Phase I assessments

LEPs will conduct approximately 22 Phase I assessments (11 Hazardous and 11 Petroleum), at an approximate cost \$3,000 per assessment.

\$38,478

Phase I report and community review

PM and Planning staff will prepare a summary report on Phase I findings. These will provide a single, comprehensive view of the issues across all assessed properties, written for the public and Metro decision-makers. The report will be the basis for community discussion and prioritization of sites to receive Phase II selection.

Task 4: Phase II Assessments

\$160,000

Phase II assessments

Approximately 8 sites will receive Phase II assessments (4 Hazardous and 4 Petroleum) at an approximate average cost of \$20,000. Each will include the preparation of a site-specific Quality Assurance Project Plan.

\$26,652

Phase II report and community review

PM and Planning staff will prepare a summary report on Phase II findings, similar to the Phase I report. Community discussion will focus on implications of the Phase II findings for the future Community Character identified for each site by its Community Plan. Discussion will also identify priorities for a small number (likely 3) of Analysis of Brownfield Cleanup Alternatives.

Included

Prepare educational materials

above

The second round of educational materials will be professional-quality materials explaining to property owners their options for bringing contaminated properties back onto the market. Options could include how to contract to remediate the contamination on their own, with public support, through insurance, or by participating in TDEC's voluntary cleanup program. The materials will be made for this project, but can be reused in future brownfields assessments.

Task 5: Alternatives and program recommendations

\$20,000

Develop cleanup alternatives

Approximately 4 Analyses of Brownfield Cleanup Alternatives at an approximate cost of \$5,000 per site will be conducted to develop specific recommendations for managing or remediating Phase II sites.

\$25,652 Develop program recommendations

PM will develop recommendations for incorporating ongoing brownfields assessments and programs into Metro Government. This could include recommendations for funding and program operations, as well as how the program fits organizationally within Metro.

Budget table

General note: The personnel, fringe benefits, and contractor costs below are combined across Hazardous and Petroleum sites. Staff time (personnel and fringe benefits) accrue equally between Hazardous and Petroleum. Site selection (which drives contractor costs) will balancing between contaminant types.

	Personnel	Fringe benefits	Travel	Outreach hard costs	Contractors	Total budget
1. Initiation	\$15,847	\$7,805	\$7,000			\$23,652
2. Site Selection	\$19,809	\$9,757		\$3,000		\$32,566
3. Phase I assessments	\$23,770	\$11,708		\$3,000	\$69,000	\$104,478
4. Phase II assessments	\$15,847	\$7,805		\$3,000	\$160,000	\$186,652
5. Alternatives	\$14,847	\$7,805		\$3,000	\$30,000	\$45,652
Total	\$90,120	\$44,880	\$7,000	\$12,000	\$246,000	\$400,000

Leverage

Metro Planning, Public Health, and the Mayor's Office will provide significant in-kind support for this project. Metro Planning and Public Health will oversee project development. Metro will provide staff time and expertise to support the Task Force and conduct, manage, and record community meetings and other outreach activities.

This includes:

- Project oversight, support, and synthesis
- Identifying vulnerable and disadvantaged communities and developing appropriate engagement tools
- Preparing project video updates
- · Hosting the project website, including access to all priority materials and videos

The winnowing nature of the project will allow Metro Council to fund additional Phase II sites if there are community priorities that are not selected. These would follow the same track as the grant-funded assessments.

Community engagement and partnership

Community involvement plan

Community involvement will revolve around three primary approaches: Brownfields Task Force; community review sessions between each major step; and outreach to vulnerable

communities.

The Brownfields Task Force will begin with countywide interests, such as developers, environmental groups, designers, the Neighborhoods Resource Center (a local community nonprofit focused on capacity building in distressed neighborhoods), community groups that embrace Nashville's diversity, and lenders. Planners will also seek an at-large representative from Metro Council. Metro staff on the Task Force will include the Metro Planning Department, Metro Public Health Department, Metropolitan Development and Housing Authority, Mayor's Office of Neighborhoods and Community Engagement, and Mayor's Office of Economic and Community Development. As geographic areas to focus on are determined, local communities, property owners, and district Council Members will be added to the Task Force.

The Task Force will seek to incorporate local understanding of the sites and communities and learn from the assessment process to gain a better understanding of the effects of brownfields and the opportunities to reintroduce them as economically viable to meet community goals.

Community review and discussion sessions will occur between each major step in the process: geographic modeling to identify clusters and select sites, Phase I assessments, and Phase II assessments. Planning staff has a long history of success and innovation in community engagement, creating multi-type engagement strategies that combine public meetings, online materials, and "pop up" activities and events to engage a broad cross-section of the effected communities. Planning staff will also host a website with up to date information, videos, and a record of the process.

Tailored outreach for vulnerable/disadvantaged communities will be used to ensure each round of community input includes representation from impacted communities. Once geographic areas have been identified, strategies to engage vulnerable populations will be developed, tailored to the needs and opportunities for each community. For example, for some communities, visible, high-traffic sites are appropriate for "pop-up" style kiosks and stations to spread the word and highlight findings. For others, translation/interpretation of project materials are the most important strategy.

Communicating progress

Major updates will occur through the community review and discussion process. These will be designed to pivot from what was learned in one phase to setting priorities for the next phase. Each round of review and discussion may include multiple ways to participate.

In between major updates, the project website will host smaller updates, such as status updates for each phase of work, photo tours of the sites and community engagement activities, and a record of all materials presented to the Brownfields Task Force and at review and discussion sessions. Email blasts specific to this project and within the Planning Department's regular Development Dispatch will announce key dates and new materials.

Once geographic areas to focus on and nearby vulnerable or disadvantaged communities identified, project staff will develop communication strategies that match the communities' needs. One likely element will be translation and interpretation of communication materials. According to Metro Nashville Public Schools, children in Nashville speak 140 different languages at home. Many communities speaking a language other than English at home are clustered in

specific parts of the county. Determining translation needs will be an important step in identifying vulnerable and disadvantaged communities.

The project manager will work with property owners and community members to field questions and address concerns in between community events.

Government partnerships

Metro Public Health Department: MPHD brings data about and experience with brownfields and environmental health.

Tennessee Department of Environment and Conservation: TDEC maintains a Voluntary Program (VOAP). It also brings contacts with LEPs and lenders with experience in brownfields.

Metro Council Members: Metro's Council members include at-large representatives, who will be invited to provide a countywide view. It also includes district council members. District council members who include sites to be studied by this project will be invited to participate as those sites are identified.

Community partnerships

Southern Environmental Law Center: SELC, a regional non-profit that uses the power of the law for clean water, healthy air, mountains, forests, rural countryside, and the coast, will assist by participating in the Brownfields Task Force and identifying community members with environmental concerns near project sites.

Project benefits

Health and/or welfare and environmental benefits

Health and/or welfare benefits: Assessing and managing brownfield sites will increase the supply of land within walkable neighborhoods that support transit, biking, and access to green space. By quantifying the costs of cleanup and management, this will also bring these sites into productive use in key locations in suburban communities, making it more likely that high-quality retrofitting projects will be built. This will bring land into productive use in Nashville's high demand neighborhoods. When that happens, the supply of walkable neighborhoods will increase and, most crucially, expand to more affordable suburban locations.

Helping Nashville balance demand between urban and suburban locations will help manage rising housing prices, improving affordability throughout the county. Carefully managing growth will also help to deconcentrate poverty, improve access to work and services, increase active mobility and socializing, and reduce air pollution from transportation.

Environmental benefits: Identifying contaminated sites and appropriate tools to remediate them creates the opportunity to build a community consensus on reducing the impact of that contamination. Taking the next step and remediating sites will produce health benefits by reducing exposure to water and land pollution. This project twill also build greater understanding of contaminated sites in Davidson County and how that aligns with current development patterns and future plans.

Environmental benefits from infrastructure reuse/sustainable reuse Policies, planning, and other tools: Nashville's historic development pattern has been aligned to its major arterials primarily leading into and out of downtown. Old employment and retail centers dot the pikes. Healing these routes - reintroducing mixed use, transit supportive development - has long been a Nashville priority. Though some are held back by uncertainty over contamination, many are otherwise suitable for redevelopment: they have already been leveled, most have substantial development rights, and they already have access to transportation, water/sewer, and communications infrastructure.

In some cases, however, these sites lack other infrastructure: sidewalks, parks, schools, and in some cases aging water and sewer. These combine to limit the appeal of these sites for redevelopment. Part of Nashville's long range strategy is to align its Capital Improvements Budget with its overall approach to growth and preservation. The Planning Department is currently revising the capital planning process to reflect this. Aligning capital investments with brownfields assessments and tools is a critical link in achieving the future Nashvillians desire.

Integrating equitable development or livability principles: This brownfields program is part of a broader countywide strategy to align public spending and regulations to encourage growth in centers and along transit corridors while minimizing the conversion of greenfield land to suburban development. This program will identify sites that need remediation or management to reduce exposure to contamination. New redevelopment (on contaminated or potentially contaminated sites) will improve the healthiness of the building stock.

In urban locations, public investment in bringing sites to market should be designed to support affordable housing; in suburban locations, quantifying contamination should support adding lower cost homes and services to retrofit these locations into walkable neighborhoods. Both are necessary to retain Nashville's current residents living in areas potentially exposed to contamination. Finally, by coordinating this program with its overarching centers and corridors strategy, Nashville will improve access to parks, transit, schools, and other community facilities.

Economic & community benefits

Economic or other benefits: Nashville's centers and corridors are key locations for transit and affordability. Nashville is currently developing an inclusionary zoning ordinance. NashvilleNext directs other programs to create a comprehensive inclusionary housing program. Considerations of how remediated brownfields can be a resource for new affordable housing will be included.

Sites retained in the private market expand the pool of safe sites for private investment and the number of sites available for economic development activities. Because these sites generally are located along Nashville's major corridors, they will also increase access to transit. Sites that are appropriate and available for public use could be used for open space or public services.

Job creation potential: New jobs would primarily be created as a result of redevelopment spurred by quantifying remediation needs of selected sites. In cases where redevelopment is paid for with Metro financing (such as public facilities), Nashville's just-adopted local-hire amendment (requiring 40% of employees be Davidson County residents) would apply.

Program capacity and past performance

Programmatic capacity

Metro Planning will hire a Project Manager to administer the grant, oversee the Licensed Environmental Professionals, coordinate the Brownfields Task Force, and manage communications with the public. For process planning and outreach activities, the Project Manager will be supported by the Community Plans Division of Metro Planning, which has 25 years' experience working with communities throughout Nashville. This includes Project Director Gregory Claxton, who managed the NashvilleNext process to create Nashville's new General Plan. (See bio below.) For health and environmental issues, the Project Manager will be supported by MPHD, including Dr. Sanmi Areola. (See bio below.) For financial and administrative issues, the project manager will be supported by Metro Planning's financial officer, who also serves as the fiscal agent for the regional Metropolitan Planning Organization, which receives a substantial portion of its funding from state and federal grants. Metro Finance includes a Grants Coordination Officer, who works with the Planning Department's financial officer to ensure timely and appropriate completion of all required administrative and financial requirements.

Gregory Claxton, Planner

Mr. Claxton received his Masters in Urban Planning and Certificate in Industrial Ecology from the University of Michigan. He has overseen creation of two large multiphase comprehensive plans. In Austin, TX, (2009-12) and Nashville (2012-15), these complex processes wove together broad public participation with technical information and expert stakeholder engagement to create implementation-ready plans with extensive community support. Both processes worked through a community process overseen by stakeholder groups, similar to the proposed Brownfields Task Force. Mr. Claxton will oversee project development and community engagement.

Sanmi Areola, PhD, Environmental Toxicologist

Dr. Areola received his Ph.D. in Environmental Toxicology from Texas Southern University, Houston, Texas. His work focused on investigating the impact and mechanisms of action of environmental toxicants on man and wildlife. Specifically, he studied the mechanisms of action of pollutants at environmentally relevant levels such as those related to lead-induced behavioral impairments in children. Before joining Metro Public Health Department, Dr. Areola was a postdoctoral fellow with the Neuroscience Division at Baylor College of Medicine, Houston, Texas. Results of Dr. Areola's investigations have been published in many peerreviewed scientific journals. His current focus is risk assessment of the public health impacts of chemical exposures. Dr. Areola has served as expert witness on issues involving mold exposure, pesticides and fluoride addition to municipal water. Dr. Areola is also an Adjunct Faculty at Meharry Medical College where he teaches a class in Environmental Health. Recently he was a technical coordinator for EPA Region 4 Air Toxics data analyses. Dr. Areola will bring his expertise to the project development and Brownfields Task Force, as well as help connect the results of Phase I and Phase II assessments to community concerns and interests.

Audit findings

There were no Financial Statement Findings nor Findings and Questioned Costs for Federal Awards reported in the Metropolitan Government's Schedules of Expenditures of Federal and State Awards and Reports Required by the Single Audit Act as Amended and Office of Management and Budget Circular A-133 (Single Audit) for the year ended June 30, 2014. The Single Audit for the year ended June 30, 2015 is currently in process and will be available no later than March 31, 2016.

Past performance and accomplishments

Currently or has ever received an EPA brownfields grant

Metro Nashville has never received a Brownfields grant. A potential program partner, the Metropolitan Development and Housing Authority, has received an Assessment Pilot grants (2002) and an assessment, cleanup, and revolving loan fund grant (2004).

Has not received an EPA brownfields grant but has received other federal or nonfederal assistance agreements

Metro Nashville receives multiple lines of federal assistance. In 2014-15, it received more than \$191 million in federal assistance. The bulk of Metro's federal grants are pass-through.

In 2010, Metro received a \$7.5 million grant from the U.S. Department of Health and Human Services' Communities Putting Prevention to Work (CPPW) initiative. With grant funding, the Health Department, the Healthy Nashville Leadership Council, and community partners created a Community Action Plan with three overarching elements:

- Establishment of an organizational structure for this community wide effort that is strategic, collaborative, integrated, and sustainable
- 2. Attainment of an integrated, accessible web-based portal for community-wide, data driven decision-making;
- 3. Implementation of high-leverage, community-wide, multi-level strategies designed to effect policy, systems and environmental change within government, schools, work sites, communities and places of worship.

The grant created a number of programs to improve health in Nashville: a Share the Road campaign to promote safety for bicyclists; Gold Sneaker program to integrate physical activity and healthy eating into Head Start classrooms; Green Bikes community bike-share program; intergenerational Community Urban Gardens program; a Healthy Corner Markets initiative to make it possible for corner stores in food deserts to stock fresh and healthy food items; and a media campaign (including smart phone app) to promote sustained improvements in healthy eating and active living, changes in public school vending policy, and changes in policy to create healthier workplaces using the Mayor's Workplace Challenge.

The grant was structured as a cooperative agreement with the U.S. Centers for Disease Control, which monitored progress throughout the life of the grant. The Metro Public Health Department submitted monthly reports, quarterly roll-ups, and a final report; each was filed as requested, on-time. The Health Department incorporated corrective measures as they were identified by CDC during monthly conference calls and written follow-up correspondence.

	#I	

OMB Number: 4040-0004 Expiration Date: 8/31/2016

Application for Federal Assist	tance SF-424	
* 1. Type of Submission:	* 2. Type of Application:	* If Revision, select appropriate letter(s):
Preapplication	New	
Application	Continuation	* Other (Specify):
Changed/Corrected Application	Control of the Contro	
* 3. Date Received:	Applicant Identifier:	
12/18/2015		
5a. Federal Entity Identifier:		5b. Federal Award Identifier:
State Use Only:		
6. Date Received by State:	7. State Applicatio	on Identifier:
8. APPLICANT INFORMATION:	-	
* a. Legal Name: City of Chatta	anooga, Tn	
* b. Employer/Taxpayer Identification Nu	lumber (EIN/TIN):	* c. Organizational DUNS:
62-6000259		0431123410000
d. Address:		
*Street1: 300 City Hal	ll, 100 East 11th Stre	pet
Street2:		
* City: Chattanooga		
County/Parish:		
* State:		TN: Tennessee
Province:		IN. Tellitessee
* Country:		USA: UNITED STATES
* Zip / Postal Code: 37402-4223		Som switze emile
e. Organizational Unit:		
Department Name:		Division Name:
f. Name and contact information of p	nerson to be contacted on r	matters involving this application:
D-5-	* First Nam	
Mr. Middle Name:		naie
* Last Name: Booth		
Suffix:		
Organizational Affiliation: BrightBridge Inc.		
<u> </u>		
* Telephone Number: 423 667 207	7 cell	Fax Number: 423 424 4262
* Email: hbooth@brightbridgein	nc.org	

Application for Federal Assistance SF-424					
* 9. Type of Applicant 1: Select Applicant Type:					
C: City or Township Government					
Type of Applicant 2: Select Applicant Type:					
Type of Applicant 3: Select Applicant Type:					
* Other (specify):					
* 10. Name of Federal Agency:					
Environmental Protection Agency					
11. Catalog of Federal Domestic Assistance Number:					
66.818					
CFDA Title:					
Brownfields Assessment and Cleanup Cooperative Agreements					
* 12. Funding Opportunity Number:					
EPA-OSWER-OBLR-15-06					
* Title:					
FY16 Guidelines for Brownfields Cleanup Grants					
13. Competition Identification Number:					
Title:					
14. Areas Affected by Project (Cities, Counties, States, etc.):					
Add Attachment Delete Attachment View Attachment					
* 15. Descriptive Title of Applicant's Project:					
CITY OF CHATTANOOGA					
BROWNFIELD CLEAN UP GRANT 2016 FORMER GLOVER PROPERTY					
Attach supporting documents as specified in agency instructions.					
Add Attachments Delete Attachments View Attachments					

Application for	or Federal Assistan	ce SF-424					
16. Congression	nal Districts Of:						
* a. Applicant	3 TN			* b. Program	/Project 3 TN		
Attach an addition	nal list of Program/Project	Congressional Distric	ts if needed.				
			Add Attachmen	Delete Attac	chment View	Attachment	
17. Proposed Pr	roject:						
* a. Start Date:	* a. Start Date: 10/01/2016 * b. End Date: 09/30/2019						
18. Estimated F	unding (\$):						
* a. Federal		200,000.00					
* b. Applicant		40,000.00					
* c. State		0.00					
* d. Local		0.00					
* e. Other		0.00					
* f. Program Inco	me	0.00					
* g. TOTAL		240,000.00					
* 19. Is Applicati	ion Subject to Review B	y State Under Exec	utive Order 12372	Process?			
a. This appli	ication was made availab	ole to the State unde	er the Executive Or	der 12372 Process	for review on		
a. This application was made available to the State under the Executive Order 12372 Process for review on b. Program is subject to E.O. 12372 but has not been selected by the State for review.							
c. Program is not covered by E.O. 12372.							
* 20. Is the Appli	icant Delinquent On Any	Federal Debt? (If	"Yes," provide ex	planation in attach	ment.)		
☐ Yes ☐ No							
If "Yes", provide	explanation and attach						
			Add Attachment	Delete Attac	hment View	Attachment	
herein are true,	this application, I certificomplete and accurate resulting terms if I acc	e to the best of m	ny knowledge. I al	so provide the re	quired assurance	es** and agree to	
subject me to cr	riminal, civil, or adminis	trative penalties. (L	J.S. Code, Title 218	, Section 1001)			
₩ I AGREE							
** The list of cert specific instruction	tifications and assurances ns.	, or an internet site	where you may obt	ain this list, is conta	ained in the annou	ncement or agency	
Authorized Repr	resentative:						
Prefix: M:	r.	* Firs	t Name: Hale				
Middle Name:							
* Last Name: Bo	ooth						
Suffix:							
* Title:	ject Director						
* Telephone Numb	ber: 423 667 2077 ce	ell		Fax Number: 423	424 4262		
* Email: hbooth	@brightbridgeinc.c	rg			12)		
* Signature of Auth	horized Representative:	Ron Banks		* Date Signed:	12/18/2015		





City of Chattanooga

December 18, 2015

Ms. Barbara Alfano EPA Region 4 Atlanta Federal Center 61 Forsythe Street S.W. 10th Floor Atlanta, GA 30303-8960

Dear Ms. Alfano:

The City of Chattanooga is pleased to submit the following application to EPA for a \$200,000 Brownfield Cleanup Grant. The proposal targets the recently acquired, former Glover Tract in our Alton Park neighborhood which is in our federally designated Renewal Community area. This neighborhood is very economically depressed and has been severely impacted over time by brownfields which the City has been seeking to convert through remediation and private investment into assets that will fuel the neighborhood's future sustainable redevelopment. The City acquired this site in a brownfield land swap for a proposed future extension of our beautiful Tennessee Riverwalk.

The CSX corporation recently abandoned a rail line that could connect the under construction St. Elmo extension of the Tennessee Riverwalk to Alton Park brownfields we have cleaned up under EPA grants for recreation and the planned Alton Park trails. The Trust for Public Land is working to acquire this rail right of way and if EPA funds this cleanup Grant, an extension of the Riverwalk into Alton Park could become possible as early as 2018.

Among the prominent examples of our success with brownfields are the former Cavalier Site, which is now an active employment center with over 200 Electric Power Board workers; Finley Stadium and Southside redevelopment, which are now offices and prime retail; a number of sites in our much heralded riverfront development; the former Farmer's Market where the City recently invested acquisition and cleanup funds; and the site of a recently developed FedEx facility in Alton Park. These all involved local public private ventures.

The investment of federal resources has been critical to building public confidence in our brownfield opportunities across the City. Renewal Community tax incentives are creating cleanup and re-investment opportunities. Hope VI investments in community housing has leveraged significant investments in cleanup. As an outcome of two previous EPA cleanup projects, important redevelopment sites have been cleaned up and are attracting private sector interest and investment. In addition our brownfield assessment grants have identified other key properties for the future.

The City has partnered with many organizations and groups to develop a diverse agenda from the brownfield opportunities across our community. We have citizen involvement, the attention and commitment of our very effective community based organizations and a vision for redeveloping our brownfields for many different uses. The non-profit BrightBridge has served as our brownfield coordinators and continues to assist the City with business development financing. We are proud of our success, but without the commitment and support of EPA, very little of this would have been possible.

- a. Applicant Identification: City of Chattanooga, 300 City Hall, 100 East 11th Street, Chattanooga, TN 37402
- b. DUNS Number 04-311-2341
- c. Funding requested: i) Grant Type-Cleanup ii) Federal Funds requested -\$200,000, with
- a \$40,000 local cash match iii) Contamination -Hazardous Substances
- d. Location: Chattanooga, Hamilton County, Tennessee
- e. Former Glover Tract, 500 block East 38th Street, Chattanooga, Hamilton Co. TN 37410
- f. Contacts: i) Project Director: Hale Booth CEO BrightBridge Inc, PO Box 871, Suite
- 161, 535 Chestnut Street, Chattanooga TN 37402. phone 423-424-4220, Fax 423-424-
- 4262, cell 423-667-2077 e-mail hbooth@brightbridgeinc.org
- ii) Chief Executive Mayor Andy Berke, 100 East 11th Street Chattanooga TN 37402 Phone 423-425-7800, Fax 423-757-0005 e-mail Mayor@chattanooga.gov
- g. Date Submitted: December 18, 2015
- h. Project period: October 2016-September 2019.
- i. Population: i) Chattanooga (Census 2012 est) 171,279; Target Area 4,045 (2011 est).

Thanks for your continued assistance.

Sincerely,

Mayor Andy Berke City of Chattanooga

My bh

CITY OF CHATTANOOGA BROWNFIELD CLEAN UP GRANT 2016 FORMER GLOVER PROPERTY

THRESHOLD CRITERIA

1. Applicant Eligibility

- Eligible Entity The City of Chattanooga is a municipality of the State of Tennessee.
- Site Ownership The City of Chattanooga is the sole owner of the property in fee simple title.
- 2. <u>Letter from the State Environmental Authority</u> A letter of support from Paula Larson, Brownfield Outreach Coordinator, Division of Remediation Tennessee Department of Environment and Conservation (TDEC) is included in Appendix A.

3. <u>Site Eligibility and Property Ownership Eligibility</u> Site Eligibility

- a. Basic Site Information (a) Former Glover Tract, (b) 500 block East 38th Street, Chattanooga TN 37410. (c) Solely owned by the City of Chattanooga.
- b. Status and History of Contamination at the Site (a) The site is contaminated with hazardous substances. (b) Since at least 1893 the site has been a wooded floodplain of South Chattanooga Creek. The city acquired the property through a land swap in late 2012 for future use as a greenway. (c) A Phase II has identified multiple contaminants above applicable action levels. (d) The Tennessee Products Chattanooga Coke and Chemical NPL site was upstream and dumped coal tar residue into Chattanooga Creek. Historic overflow of the creek resulted in PAH contamination of the floodplain. The Chattanooga Creek streambed has been remediated by EPA and PRP funded cleanups which should prevent any future re-contamination.
- c. Sites Ineligible for Funding The site is (a) Not listed or proposed for listing on the National Priorities List, although portions of the creek bed of Chattanooga Creek which flows through the Glover Site are NPL listed by EPA as part of the Tennessee Products NPL site. According to the EPA website, the site was cleaned up in 1998. The cleanup also included "hot spot" portions of the creek bank. EPA website reports remedy construction complete in January 2008. The proposed project involves overbank contamination not listed or covered by the cleanups in an area proposed for a walking trail. (b) Not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA; and (c) Not subject to the jurisdiction, custody, or control of the United States government.
- d. Sites Requiring a Property-Specific Determination. This site does not require a Property-Specific Determination from EPA.
- e. Environmental Assessment Required for Cleanup Proposals. A written Phase I Environmental Site Assessment (ASTM E1527-13) was completed on the

site on September 27, 2012 prior to the City of Chattanooga acquiring the property. An ASTM E 1903-11 or equivalent Phase II site assessment report was completed. Discussions between Dallas Whitmill and Olga Perry of EPA determined that the *Health Consultation: Glover Site (a/k/a Tennessee Products), EPA ID# TND071516959. Chattanooga, Hamilton County Tennessee February/March 2006* is equivalent to a Phase II.

Property Ownership Eligibility:

- f. CERCLA ss107 Liability The City of Chattanooga is not potentially liable for contamination of the site under CERCLA 107. Hazardous substances at the site are there as a result of previous activity on the site or adjacent to the site prior to the City assuming ownership. No process that might be polluting or contaminating has occurred on site since the city acquired the parcel.
- g. Enforcement Actions There are no known ongoing or anticipated environmental enforcement actions related to the brownfield site for which funding is sought.
- h. Information on Liability and Defenses/Protections
 - i. Info on Property Acquisition -The property was acquired by the City of Chattanooga through a land exchange with LKQ Corporation in February 27, 2013. The property is now in the sole fee simple ownership of the City of Chattanooga. There have been no familial, contractual, corporate, or financial relationships or affiliations with any prior owners.
 - ii. Timing and/or Contribution Toward Hazardous Substances-All disposal of hazardous substances at the site occurred before the City acquired the property and the City did not contribute to any release of hazardous substances at the site. The City has not at any time arranged for the disposal of hazardous substances at the site, nor transported hazardous substances to the site.
 - iii. Pre-Purchase Inquiry The City knew the chain of ownership and general uses of the property at the time it was acquired in a land swap. Phase 1 and Phase II (equivalent) assessments were completed for the City of Chattanooga prior to acquisition and updated by Terracon Consultants, Inc. (a geotechnical engineering firm broadly experienced in brownfield work) with an updated Phase I on September 27, 2012, and a Phase II equivalent report was agreed upon with Olga Perry of EPA Region IV.
 - Post Acquisition Uses This is detailed in section 2 a of Main Proposal.
 - v. Continuing Obligations The City has established barricades to limit any potential off road vehicular access and thus secure the site as much as feasible. Contaminants are primarily subsurface so there is reduced risk of release; however, the City wants to reduce any potential for illegal dumping or unauthorized access. The City is complying with all land use and institutional controls relative to the property and will be pleased to assist and cooperate with those performing the cleanup and insure appropriate access to the property.
 - vi. Petroleum Sites -N/A

4. Cleanup Authority and Oversight Structure

- a. The City through the non-profit BrightBridge Inc. as the Authorized Organization Representative will enter the site into a Brownfield Voluntary Agreement under the Tennessee Voluntary Cleanup Oversight and Assistance Program (VOAP). The agreement will require complying with all applicable federal and state laws to ensure that the cleanup protects human health and the environment.
- b. The City does not anticipate any problems with access to adjacent properties in the unanticipated event this were necessary. The City has an active citizen involvement structure with effective neighborhood level communication and the brownfields cleanup work enjoys strong community support. There are ample public right of ways around the project location that could be used for offsite testing etc. and as the last resort, the City does have the right of eminent domain for a temporary construction type of easement if needed to acquire access adjacent to the project.

Cost Share

The City of Chattanooga will provide up to \$40,000 in local matching funds for the cleanup grant of \$200,000 to carry out this \$240,000 project. This is explained in detail in section 2 a of the main proposal.

6. Community Notification

This section is discussed in detail in Section 3a of main proposal.

Copies of the certified ad, agenda of the December 14th meeting, minutes and the sign in sheets are attached in appendix B. Letters of support from community groups, non-profit project partners, governmental agencies and training providers are attached in appendix C.

1. Community Need [20 points]

a. Targeted Community and Brownfields [8 points]

i. Targeted Community Description [5 Points]

The 3.7-square-mile Alton Park redevelopment area was once home to the foundries, chemical plants, tanneries, brick kilns, glass container manufacturers, and textile mills that made the City of Chattanooga a thriving hub of manufacturing. For nearly a century, the economy in Alton Park was strong and the area bustled with industrial jobs, local businesses, and residential neighborhoods. However, vacant properties throughout the area, as well as Chattanooga Creek, were used as dumping sites for area industries. The Tennessee Products Chattanooga Coke and Chemical site was NPL listed, but is now remediated. Velsicol Chemical Company went out of business and left a large RCRA landfill referred to as Residue Hill. Residue Hill is a major concern for the Community.

As conditions declined, many residents who could afford to do so moved to the suburbs. As the population fell, the racial balance of Alton Park shifted from majority white to predominantly African-American (94%). In the 1960s and 70s, new manufacturing methods and the changing economy brought the deterioration of the major industries in Chattanooga. Many decaying buildings in Alton Park were left contaminated or perceived to be contaminated. Schools closed. Retail businesses

shut their doors. The population in Alton Park has declined by over 50 percent from over 8,000 in 1980 to 3,886 today.

Demographic Comparison of Targeted Area with City, State and Country

	Alton Park (e.g. Census Tract)	Chattanooga	Tennessee	US
Population:	3,886 ³	167,971	6,346,1131	308,745,5381
Unemployment:	29.5%	$7.3\%^{2}$	$7.4\%^{2}$	6.1%2
Poverty Rate:	61.6%	23.5%	16.7%	11.8 %3
Percent Minority:	93.6%	42%	22.4%	26.7%
Median Household	\$12,417	\$49,891	38,591	\$51,3713
Income: Other:				

Data is from the 2010 U.S. Census data and is available at http://www.census.gov/.

b. Impacts on Targeted Community [5 Points]

Chattanooga residents living in the Alton Park neighborhood have long complained of odor and fumes from ground and water contamination, as well as industrial facilities. Many of the companies causing the concern have closed, but not without leaving environmental legacies. Evidence of industrial dumping, most prolifically foundry sand, and chemical contamination, has been well documented through EPA and TDEC activities, as well as numerous Environmental Site Assessments. Research by Kim Davis, University of Tennessee (UT) Waste Management Research and Education Institute Knoxville, and Mary Rogge, UT College of Social Work, has found a disproportionate share of environmental contamination exposure in the Alton Park community. According to an EPA funded community-wide assessment, the Alton Park brownfields inventory has identified more than 206 parcels. The proposed 55 acre Glover Tract cleanup site between Workman Road and E 38th Street consists of one of the remaining major parcels.

Research by the State of Tennessee (http://health.state.tn.us/statistics) and the Ochs Center (ochscenter.org/documents/SOCRR2008_earlychildhood.pdf) document a decade long pattern of concentrated low birth weight infants being born in the neighborhoods surrounding the proposed cleanup project. The National Goal for low birth weights is 5 percent; Hamilton County where the project is located is the fifth highest ranked county in the state with low birthweights at 10.5 percent. For South Chattanooga neighborhoods where the project is located, this increases by a third to 13.8 percent low birthweight for this sensitive population. County level statistics from these same sources also indicate the project location is ranked in the second highest quartiles in the state for infants born with major birth defects and cardiovascular birth defects (1999-2003). The Hamilton County infant mortality rate for black infants is the

²Data is Aug. 2014 from the Bureau of Labor Statistics and is available at www.bls.gov

³Data is from the 2012 American Community Survey

fourth highest in the state at an unacceptable 23.7 percent. Sixty-six percent of these new births are to single mothers, over half of which have no high school degree and even less opportunity to move from the neighborhood. Many of the potential pollution sources have been removed or isolated. This project will remove sources that are not in easy contact with the population, but will have a major benefit in safe access to exercise and recreation through the Alton Park Riverwalk Extension. Safe walking trails will increase health and reduce some of the problems caused by unhealthy lifestyles.

c. Financial Need [7 Points]

i.) Economic Conditions [3 points]

Unemployment and poverty rates are high, educational attainment is low, and most families are headed by a single mother. 2010 Census data indicate an unemployment rate of 29.5 percent, 61.6 percent poverty rate and a 66 percent female head of household rate for this severely distressed neighborhood. The 2010 Census documented a median household income of \$12,417, which is 24.9 percent of the Chattanooga median family income of \$49,891. Home ownership rates in the area are extraordinarily low with 32.5 percent of occupied housing units owned by the resident. Actual and perceived environmental pollution has led to lower property values, disinvestments, and abandoned property. The social and economic fabric of the community has suffered dramatically. Alton Park is part of The Chattanooga Urban Community as designated by HUD.

The City, County, State and Federal governments and non-profits have spent MILLIONS in helping this area to recover. Chattanooga has assumed ownership of several Brownfields and helped return them to productive use. This project involved a land swap of the Tennessee Products Chattanooga Coke and Chemical remediated NPL site for the Glover Tract, a lowland forest that is key to the greenway. LKQ (a Fortune 500 Company) purchased the lowland forest and swapped it for the remediated Chattanooga Coke and Chemical site. Since the swap in February , 2013, LKQ has spent \$__Million in building new state-of-the-art automobile disassembly plants which currently employs 24 full time employees and another 25 are being added in 2016. These are jobs for the community and the new facilities removed blight and will foster more development.

Chattanooga is in the midst of a \$250,000,000 sewer upgrade to fix stormwater overflow problems. The sewer lines in Alton Park are presently under repair. This has tied up considerable local resources.

The Alton Park Riverwalk Extension will cost in the neighborhood of \$6-9 Million. This will be a combination of City, County, State, Federal, Private and Foundation funding.

ii.) Economic Effects of Brownfields [4 points]
With the widespread presence of brownfields in this neighborhood, private investment has been stymied, but is beginning to return. If the blighting influence of contaminated neighborhood brownfields can be significantly reduced or

eliminated, it will result in significant availability of desirable land for redevelopment of needed open space, recreation facilities, new in fill housing and employment opportunities.

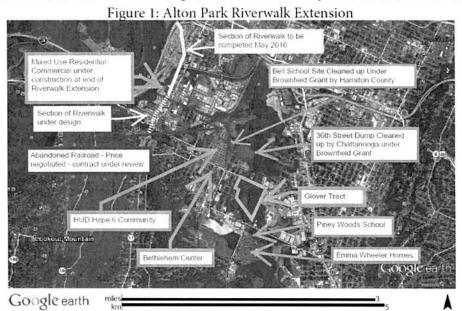
The Glover property is a lowland forest that is prone to flooding. Its industrial/commercial worth is low, but it is a wonderful tract for a greenway that can connect a depressed community to the heart of the City. Numerous studies have shown that greenways boost a community. Already a \$20 Million mixed residential/commercial development is being built on a Brownfield where the Riverwalk extension will open in May. This is where the Alton Park extension will start.

2. Project Description and Feasibility of Success [30 points]

a. Project Description [15 Points]

i.) Existing Conditions [5 points]

The City of Chattanooga has been interested for a number of years in continuation of the successful Riverwalk through the development of a greenway trail in Alton Park. The Alton Park Extension of the Riverwalk will connect key community facilities such as housing developments, schools and employment centers. This greenway trail plan, Chattanooga Creek Greenway Conceptual Greenway Plan was developed by the Trust for Public Land. One of the initial questions raised by community representatives and city officials was if the trail site through the Glover tract could be made safe for residents and visitors to use due to past toxic pollution. With this question in mind, the Tennessee Department of Health, Division of Environmental Epidemiology has been involved in planning with stakeholders. Residual contamination conditions were tested and evaluated by the Agency for Toxic Substances and Disease Registry (ATSDR). This assessment is documented in the report Health Consultation: Glover Site (a/k/a Tennessee Products), EPA ID# ND071516959. Chattanooga, Hamilton County Tennessee February/March 2006.



The proposed brownfield cleanup project will consist of the cleanup of a 50-foot buffer zone along approximately 2,050 lineal feet of Chattanooga Creek for a future greenway corridor through a 55 acre wooded site which is one of the largest remaining undeveloped parcels in the Alton Park community. The site is bisected by Chattanooga Creek and is part of the creek floodway which likely is responsible for the site not being previously developed. Unfortunately this site flooding characteristic has also been responsible for depositing significant contaminants on the property over many years from former manufacturing sites immediately Several state and federal RCRA or NPL sites exist within close proximity to Chattanooga Creek. In the floodplain pollutants such as coal tar, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and pesticides have been commonly reported (ATSDR 1994, EPA 1996, 2002). The EPA completed two phases of cleanup; the first in 1997 to 1998. The University of Tennessee at Chattanooga received an environmental justice grant from EPA to perform environmental sampling and selected the Glover Tract for the analysis. Soil samples were tested and the results from 59 soil samples along the creek corridor in the Glover tract tested for PAH concentration ranged from 18.8 to 523.0 milligrams per kilogram (mg/kg). The main concern for PAHs is contact or ingestion. Currently there is little exposure from the site, but they need to be addressed before it can become a walking trail.

The environmental concerns and the fact that the property has been in private ownership and difficult to acquire have been major impediments to development of the neighborhood greenway project which is viewed as critical to the long term redevelopment of the entire neighborhood. Now that studies and research have concluded that the site can feasibly be remediated for limited public access, the issue that remained was ownership. The ownership issue has now been resolved through a land exchange in which the City of Chattanooga traded the nearby former Chattanooga Coke and Chemical Brownfield site to a private company, LKQ, which is reusing the remediated site. See V.B.1.c for details of the land swap and benefits to the community.

ii) Proposed Cleanup Plan [10 points]

The City of Chattanooga desires to redevelop the Glover Tract as an integral part of the planned Chattanooga Creek (aka Alton Park) Extension of the Riverwalk which will provide 1) community recreational opportunities; 2) access to key community facilities such as schools, housing concentrations, employment centers and 3) preservation and protection of important community environmental resources. The Alton Park Greenway construction schedule hopefully will be advanced to 2018 with the acquisition of the recently abandoned CSX railroad (see Figure 1). The Trust for Public Land is in active negotiation with CSX for the abandoned right-of-way. Chattanooga has already completed 10 miles of the Riverwalk. The section from Ross's Landing to St. Elmo where the Alton Park Extension will begin is under construction and will open in May 2016. The Riverwalk is a highly leveraged effort between the City of Chattanooga (numerous departments), Hamilton County (numerous departments), projects like the Brownfield project, The Trust for Public Land, various grant agencies and donations of the general public and philanthropic organizations.

Three alternatives for cleanup were evaluated in a draft ABCA. The most cost effective and recommended alternative provides for removal of identified soils and a clean separation barrier for pathway users through the use of an asphalt/concrete pathway and soil backfill. The soil backfill will be part of this grant, but, the asphalt pathway will be funded under the Riverwalk. This alternative provides for a 50 foot buffer zone from Workman road on the south side to East 38th street on the north side. This is along the general alignment tested by ATSDR previously. This parallels scenic portions of Chattanooga Creek and is approximately 2,050 feet in length through the Glover tract. Soils would be removed to a typical depth of 6 inches through the buffer zone. Removed materials are assumed upon the basis of the ATSDR testing to be suitable for disposal offsite at a subtitle D landfill facility. Except for the 10 foot wide asphalt or concrete paved walking/bike path (funded as part of Riverwalk Extension), the balance of the buffer zone backfill will be imported clean soil fill. The unpayed backfill will be seeded, but the cost estimates do not include actual landscaping which will be also funded under the Alton Park Riverwalk Extension. Detailed cost estimates for the Riverwalk Extension have not been developed, but have been running up to \$3 Million for mile for trail, lighting, landscaping, bridges etc.

This cleanup plan provides adequate separation for users from prior site contamination by removal of PAH contaminants along a corridor of use and development of a buffer area from the greenway trail. This approach is technically effective as a direct physical elimination of the contaminants that produce unacceptable public risk. With removal and off–site disposal of contaminants, the approach requires no special post remedy institutional or land use controls for the property as the buffer zone. The property will remain in public ownership and no further development is anticipated as it is a floodway and flow impediments are not allowed in floodways. The floodway location and corresponding wetland management issues may require some boardwalk alternatives to mitigate fill needs and this is anticipated to reduce cost projections identified in the ABCA, but this detailed alternative construction cost estimation cannot be addressed until detailed project cleanup design work is done.

There is little probability of additional future contamination of the Glover site from flooding once the site is remediated. There will obviously be future flooding, but the original upstream sources of pollution are largely removed, remediated or significantly mitigated.

a. Task Description and Budget Table [10 Points]

BUDGET DETAIL						
Budget Categories	Project Tasks (\$)					
	Prog.	Engineerin	Remediatio	Totals		
Personnel						

Fringe Benefits				
Travel ¹	\$3,500			\$3,500
Equipment ²				
Supplies				
Contracts	\$20,000	\$53,000	\$209,000	\$282,000
Leverage Fill/Disposal			-\$45,500	-\$45,500
Total Federal Funding (not to exceed \$200,000	\$20,000	\$50,000	\$130,000	\$200,000
Cost Share ³	\$3,500	\$3,000	\$33,500	\$40,000
Total Budget	\$23,500	\$53,000	\$163,500	\$240,000

- 1 Travel to brownfields-related training conferences is an acceptable use of these funds.
- 2 EPA defines equipment as items that cost \$5,000 or more with a useful life of more than one year. Items costing less than \$5,000 are considered supplies.

3 Applicant must include the cost share in the budget even if applying for a cost

Project Services – This includes attendance at the Brownfield Conference. The City will issue a solicitation for Management of Programmatic Activities. BrightBridge has been the only respondent in all the previous solicitations and experience in proposal is based on BrightBridge's experience performing for the City.

Engineering – entails development of design documents necessary for successful completion of the project and project oversite during cleanup. Chattanooga will issue a solicitation for engineering services to comply with 40 CFR 31.36. Many details of are in the Draft ABCA.

Cleanup – includes safely removing the contamination, decontamination of equipment and disposal of contaminated soils. It also involves replacing excavated contaminated soil with clean soil and gravel and grading and stabilizing the site to prevent erosion. Paving of the pathway will be covered under the Riverwalk Extension. Construction related cleanup implementation will be by competitive bid in compliance with 40 CFR 31.36. Details are in ABCA.

NOTE: The RACER Model was used in the ABCA for comparison of the alternatives. Experience has shown that this model uses **WORST** case numbers for decon and tends to be high. After running the comparison, the preferred option was altered to reflect local costs and levels of contamination.

Outputs

- 1) Solicitation for Management of Programmatic Activities (by City of Chattanooga)
- 2) Solicitation for Engineering Services (by City of Chattanooga)
- 3) Preparation of Final Cleanup Plan for State Approval (by selected Engineering Company) and entering Voluntary Cleanup Oversite and Assistance Program
- 4) Preparation of Bid Documents for Cleanup (By selected Engineering Company)
- 5) Award of Bid (City of Chattanooga)

- 6) Community Involvement Plan (by selected Management of Programmatic Activities awardee)
- 7) Quarterly Reports (by selected Management of Programmatic Activities awardee)
- 8) Health and Safety Plan (by selected Engineering Company and Contrator)
- 9) All Reports to EPA (by selected Management of Programmatic Activities awardee)

c. Ability to Leverage [5 points]

Chattanooga has a long history of leveraging projects. The new Volkswagen Plant is on a former Department of Defense Brownfield that Chattanooga and Hamilton County leveraged cleanup and development. Due to Chattanooga's location and industrial history there are very few greenfields to develop; thus it is necessary to redevelop brownfields. This project is a result of public and private leveraging and is a necessary precursor to leveraging additional community investment in a highly distressed community.

See V.B.1.c for details of the land swap to acquire the Glover Tract and the Multi-million dollar investment it has already created in the community. By the time the project is complete and the Riverwalk extension is built, EPA's investment would be part of a \$6 – 9 Million highly leveraged project. If further private development occurs like it has along other parts of the Riverwalk, several Million more in private investment is likely in the community.

Considerable construction is underway in Chattanooga. This is creating an excess of clean fill that needs a home. Chattanooga is working with the various projects to obtain free or greatly reduced cost fill. The project is budgeted with \$86,728 in fill, and \$30,000 in leveraged clean fill is anticipated.

The contaminated soil removed from the site will be going to the Chattanooga Landfill near Birchwood in Hamilton County. Estimated non-hazardous disposal is \$55,850. We believe we can leverage \$20,000 savings by using part of the soil as daily cover at the landfill. This will require coordination with the Tennessee Department of Environment and Conservation and landfill operations. The budget is tight and leveraging of clean fill and contaminated soil disposal will assure a successful project.

3. Community Engagement and Partnerships [15 points]

a. Plan for Involving Targeted Community & Other Stakeholders; and, Communicating Project Progress [5 points]

Community involvement has played a major role in shaping the brownfield program for the past 15 years and is the foundation of its success. In 1999, approximately two hundred and fifty people participated in Alton Park Community Master Plan community meetings that have shaped the redevelopment opportunities in the community over the following years. The brownfield redevelopment work in the community has been a major outcome of that initial process and has in turn spawned many community meetings to discuss the progress and additional opportunities for brownfield redevelopment.

On February 9th 2012 a major community meeting on brownfield projects was held at the Bethlehem Center in Alton Park with approximately 75-100 participants. A number of brownfield projects were reported on and discussed with the community including the Glover Tract which is the focus of this application. The City was considering making a special application at that time but was not ultimately able to do so. However this project received considerable positive community press through electronic and print media due to the opportunity for job creation in the neighborhood as a result of the land exchange and reuse of the properties.

This was followed up on July 5th 2012 with an additional public meeting to discuss potential plans for the Glover site as well as redevelopment plans for several other cleanup sites. A public meeting was held on November 8th 2012 to discuss specific findings of the phase II assessment on the Glover site and the analysis of brownfield cleanup alternatives for the site. Another meeting was held on January 20th regarding this site and RLF funding potential for other sites.

Another Brownfield meeting was held on December 9th 2014 to discuss this proposal and numerous brownfield projects proposed or underway. The latest Brownfield Meeting was December 14th, 2015 at the Bethlehem Center. This emphasized the Glover Tract and the Riverwalk Extension. Due to a conflict with two of the community groups, a second meeting was held the same night about 4 blocks from each other. To date translations services have not been needed, but if necessary translators will be furnished for one-on-one briefings.

All participants in the community meetings and other continuing brownfield assessment meetings having provided their name, contact information, and organization or neighborhood represented on a sign-in sheet. They will be notified by email and/or regular mail of further community meetings during the cleanup and redevelopment of the Glover Tract. Chattanooga maintains a current list of all community organizations and contacts. The presidents of all the organizations received a phone call about the meeting and encouragement for their members to attend. Participants will refine site cleanup and redevelopment objectives. Other community meetings will follow, using the same notification methods. These meetings will include information sharing on the progress of the cleanup project and community involvement in the redevelopment of the site. A repository of information is at BrightBridges offices.

b. Partnerships with Government Agencies [5 points]

A partnership of local, state, and federal organizations addressing brownfields issues in Alton Park began with the original Brownfields Pilot Grant. The Mayor's Brownfield's Task Force, a leadership group representing major public, public-private, and nonprofit partnerships, renewed that partnership in 2005 and began spearheading the development of a more coordinated program for the timely remediation, reclamation, and reuse of Brownfield sites.

The City through BrightBridge enters into a Volunteer Cleanup Oversite and Assessment Agreement (VOAP) with Tennessee Division of Remediation. The City works with the state to review the Final Cleanup Plan through eventual completion of the project.

c. Partnerships with Community Organizations [5 points]

The Alton Park Piney Woods Neighborhood Association has agreed to be the coordinate and host Public Meetings and help coordinate the effort with the community. The Alton Park Development Corporation has agreed to furnish a document depository at their Center and furnish meeting space for the meetings. The Community has requested the City do all that is legally possible to have the awarded contractor to hire qualified workers within the Community. The Alton Park Development Corporation is actively promoting Alton Park and sees the Greenway as a major tool in turning around this depressed community. The Southside Leadership Advisory Council will actively help raise funds for the Alton Park Riverwalk Extension. The Chattanooga Neighborhood Enterprises is actively helping inventory potential residential infill housing sites. CNE feels the Riverwalk Extension will help revitalize the community as a place to live.

The Trust for Public Land has provided community planning assistance on the Riverwalk since its inception and is providing it for the Alton Park Riverwalk Extension. TPL is in active negotiations with CSX Railway to obtain the railroad right-of-way abandoned in Winter 2014. This right-of-way provides a more cost effective route for the Riverwalk Extension and could bring it to construction in 2018. The Glover tract is key to the Riverwalk Extension. The Regional Planning Agency is also helping with planning.

4. Project Benefits [20points]

a. Health and/or Welfare and Environment [10 points]

i. Health and/ or Welfare Benefits [5 Points] Looking at the Proposed Alton Park Extension to the Riverwalk on Page 7, it is readily evident that this parcel is key to the greenway development. The project has been on the drawing board for several years but has not progressed due to the unavailability of the Glover parcel and high cost of the former proposed route into the community. The probable acquisition of the abandoned railway could bring the project to a 2018 start date. Actual greenway construction funding is from a dynamic mixture of Public/Private/Philanthropic funding sources. This Brownfield project will remove more contamination from the community, while protecting a bottomland forest. The greenway will be a safe way for the community to obtain exercise and reduce health effects caused by lack of exercise.

ii. Environmental Benefits

The 2010 Land Use Plan for Alton Park/ Piney Woods Community identified Brownfields as a problem. Several of these have been cleared, but many more exist. The extension of the Riverwalk into the community removes more contamination, and fosters environmental education and a healthier community through exercise through walking and biking as well as other recreational opportunities. These opportunities in attract new people and increase the desirability of the community. As the community turns around, some of the Brownfields are worth remediation and redevelopment by the private sector.

b. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse [5 points]

i) Planning, Policies or Other Tools [2 points]

The Chattanooga Office of Sustainability was recently merged into the Chattanooga-Hamilton County Regional Planning Agency. The bi-annual Excellence Awards Program rewards projects for Sustainable Industry, Public Infrastructure, Healthy Communities, Green Building and Regional Public Parks. A significant effort is being made to have livable communities where people can walk to work and stores. The Regional Planning Agency is one of our partners.

Chattanooga is currently investing \$250,000,000 in improvements to the sewer to handle stormwater overflow. \$66 Million of this is underway in South Chattanooga.

ii.) Integrated Equitable Development or Livability Principles [3 points]

This parcel is key to tying Alton Park into the city wide Riverwalk. The eventual plan calls for 22 miles of trails city wide, of which 10 miles are complete. The ST. Elmo Extension is under construction and the Alton Park Extension will extend from it. Several brownfields in Alton Park have been cleaned up and some redeveloped for jobs and housing. Others have been cleaned up for recreation and trails. This parcel is key.

c. Economic and Community Benefits [5 points]

i.) Economic or Other Benefits [3 points]

The land swap (see 1c1) necessary to obtain this is already creating jobs. Construction of the walkway though the site will create short term construction jobs, but the impact of the greenway and enhanced recreation on a depressed neighborhood will draw other long term investments into the neighborhood creating more jobs.

ii.) Job Creation Potential: Partnerships with Workforce Development Programs [2 points]

Chattanooga State Community College and the Tennessee College of Applied Technology at Chattanooga State are the primary workforce development programs in the area. The City and local industry have developed state of the art training programs for chemical plant operation in cooperation with Wacker Chemical, automation mechatronics in cooperation with Volkswagen, welding in cooperation with Alstom Power Systems and many more skills necessary for economic recovery in the depressed community. Many of the industries that will return to the Alton Park community will be light industries and skills like welding and automation will be desirable. The City of Chattanooga and BrightBridge have played integral parts in helping Chattanooga State develop these programs and receive the necessary facilities and funding.

5. Programmatic Capability and Past Performance [20 points]

a. Programmatic Capability [12 points]

The City of Chattanooga's Brownfields Redevelopment Program (Mayor's Office, BrightBridge Inc., and Chattanooga-Hamilton County Regional Planning Agency, along with other city offices and departments) have and will provide significant in-kind support to this project. In addition, the non-profit Trust for Public Land will assist in additional community planning for future development of the cleanup site as a key component of

the Riverwalk Alton Park Extension. The Trust for Public Lands is in negotiations with CSX to obtain the abandoned railway to expedite the Greenway. These agencies, departments and organizations will also be represented at the community meetings to be conducted through the completion of this project.

In-kind activities also include publicizing community meetings, providing environmental engineering, analytical support, economic and financial analysis in leveraging other resources, and public utilities and facilities planning assistance. These are among the support resources the City provides to the overall Brownfields Redevelopment Program, including this project, and the City will absorb those costs.

Hale Booth, President of BrightBridge Inc., manages the day to day activities of all the Brownfield Grants. As needed Hale utilizes Tom Carson PE (retired) a part-time engineer that has 35 years experience with Chattanooga Brownfields. Tom has been instrumental in identifying and cleanup of numerous sites in Chattanooga and Alton Park since 1980. Tom was part of the team that discovered the original problems in Chattanooga Creek and the Glover Site. He has had an integral part in writing the Brownfield cleanup grants and is a consultant on cleanup issues. The City reissues solicitations for Brownfield Programmatic Activities as needed, but the non-profit BrightBridge is the only one to ever answer the solicitation. All contracting is through the City of Chattanooga procurement system and meets all procurement requirements. All engineering, sampling and construction are by approved contractors selected through approved Chattanooga procurement procedures.

b. Audit Findings [2 points]

The City of Chattanooga administers a number of different federal and state grants. Research for the past five years indicates there have been no adverse audit findings.

c. Past Performance and Accomplishments [6 points]

i) Currently or Has Ever Received an EPA Brownfields Assessment, Revolving Loan Fund, or Cleanup Grant [6 points]

The City of Chattanooga is rich in brownfields and as a result has aggressively pursued the comprehensive assessment, planning, cleanup and redevelopment of these assets into productive reuse. The City's most recent coalition assessment grant from EPA for \$250,000 was awarded in 2010 and has resulted in 12 Phase 1 assessments followed by 5 Phase 2 assessments including the Glover tract which is the focus of this cleanup application. The Glover tract has initially been identified as a possible assessment site in the original 2006 Assessment Grant targeting locations in Alton Park. At that time the private property owners would not permit the assessment to be done. This was again considered in the 2008 assessment grant, but had to be passed over again due to the lack of consent of the property owner.

Chattanooga received a combined EPA brownfield cleanup grants for the old 36th street dump site and the TN Avenue site at the railroad underpass. Both are complete.

In 2009 the City of Chattanooga was awarded \$1,000,000 in EPA grant funds with \$224,296.88 matching from the City of Chattanooga for a brownfield RLF (managed

by BrightBridge). To date the City has funded four cleanup projects through the EPA RLF. Currently over \$1,161,484.240in project funds are obligated, and the City will be applying for more funds in the next round.

In addition to these five recent EPA funded brownfield grants the City of Chattanooga and/or BrightBridge for the City have successfully administered two prior assessment grants, three brownfield cleanup grants and a prior training grant. These additional prior grants are older and with more time have leveraged greater long term community impacts and large economic investments

1. Compliance with grant requirements [3 points]:

All of these projects have been successful in achieving project goals, documented compliance with grant requirements, submitted work plans, schedules, met all quarterly reporting requirements, and drawn down funds in a timely manner. Cleanup work has been entered in ACRES and is updated as new information becomes available on the longer term economic impacts of the cleanup sites.

2. Accomplishments [3 points]:

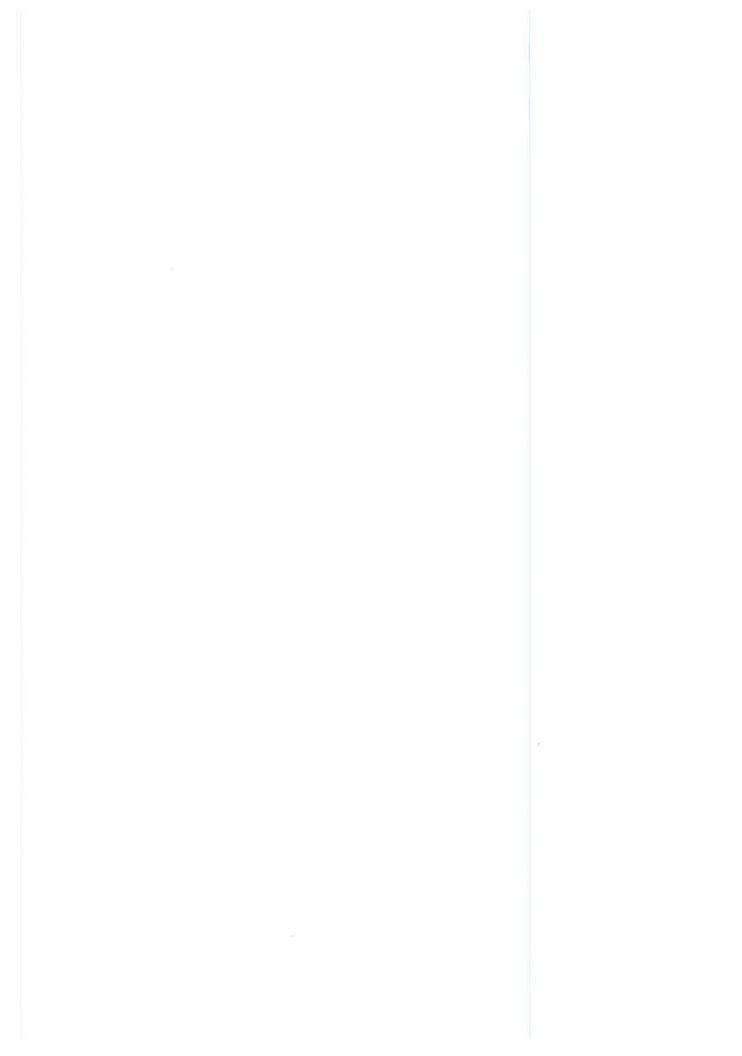
BrightBridge, as manager of projects for the City of Chattanooga, has accomplished the following:

The Ohls Avenue brownfield has been cleaned up with an EPA Brownfield Grant and Erlanger Hospital is planning a new Community Health Center on the Ohls site to replace the aging Southside Community Health Center.

The Tennessee Avenue Brownfield site has been remediated with an EPA Brownfield Grant. The City wants the Southern part of the site to expand an existing recreation area that will tie the Alton Park and St. Elmo Communities together. The Northern part of the site will be used for needed commercial development near the base of the incline.

The 36th Avenue site is competed using EPA Brownfield and City funding and is planned to become baseball and softball fields along the Alton Park Extension of the Riverwalk.

8			9



OMB Number: 4040-0004 Expiration Date: 8/31/2016

Application for	r Federal Assista	ınce Si	F-424					
* 1. Type of Submis	ssion:	* 2. Ty	pe of Application:	* If R	evision, select appropriate letter(s):		
Preapplication	n	⊠ N						
Application				* Oth	er (Specify):			
	rected Application		evision					
* 3. Date Received:		4. Appl	licant Identifier:					
12/17/2015								
5a. Federal Entity Id	dentifier:			5b	. Federal Award Identifier:			
State Use Only:		68						
6. Date Received by	y State:		7. State Application	Ident	ifier:			
8. APPLICANT INF	ORMATION:							
* a. Legal Name:	City of Knoxvil	le						
* b. Employer/Taxpa	ayer Identification Nun	nber (EII	N/TIN):	• 0	: Organizational DUNS:			
62-6000326				0.4	124535300000			
d. Address:							23	
* Street1:	400 Main Stre	et						1
Street2:	Suite 655							ī
* City:	Knoxville							-
County/Parish:								
* State:					TN: Tennessee			
Province:								
* Country:					USA: UNITED STATES			
* Zip / Postal Code:	37902-2494							
e. Organizational l	Unit:							
Department Name:				Div	vision Name:			
f. Name and conta	ct information of pe	erson to	be contacted on ma	atters	involving this application:			
Prefix: Ms.		7	* First Name		Anne			
Middle Name:								
* Last Name: Wall	llace							\neg
Suffix:								
Title: Deputy Di	rector, Office	of Rec	ievelopment					
Organizational Affilia	ition:							
* Telephone Number	r. 865-215-2644				Fax Number: 865-21	5-3035		
* Email: awallace	e@knoxvilletn.g	ov				-		
								1

Application for Federal Assistance SF-424
* 9. Type of Applicant 1: Select Applicant Type:
C: City or Township Government
Type of Applicant 2: Select Applicant Type:
Type of Applicant 3: Select Applicant Type:
* Other (specify):
* 10. Name of Federal Agency:
Environmental Protection Agency
11. Catalog of Federal Domestic Assistance Number:
66.818
CFDA Title: Brownfields Assessment and Cleanup Cooperative Agreements
Brownfields Assessment and Cleanup Cooperative Agreements
* 12. Funding Opportunity Number:
EPA-OSWER-OBLR-15-06
* Title:
FY16 Guidelines for Brownfields Cleanup Grants
13. Competition Identification Number:
Title:
14. Areas Affected by Project (Cities, Counties, States, etc.):
Add Attachment Delete Attachment View Attachment
* 15. Descriptive Title of Applicant's Project:
The City of Knoxville is applying for a cleanup grant at the Former McClung Warehouses on Jackson Avenue in Downtown Knoxville.
Avenue in bowncown knowviite.
Attach supporting documents as specified in agency instructions.
Add Attachments Delete Attachments View Attachments

Application for Federal Assistance SF-424	
16. Congressional Districts Of:	
* a. Applicant TN 2nd	* b. Program/Project TN 2nd
Attach an additional list of Program/Project Congressional District	cts if needed.
	Add Attachment Delete Attachment View Attachment
17. Proposed Project:	
* a. Start Date: 10/01/2016	• b. End Date: 09/30/2019
18. Estimated Funding (\$):	
* a. Federal 150,000.00	
* b. Applicant 30,000.00	
* c. State 0.00	
* d. Local 0.00	
* e. Other 0.00	
* f. Program Income 0.00	
*g. TOTAL 180,000.00	
* 19. Is Application Subject to Review By State Under Exe	cutive Order 12372 Process?
a. This application was made available to the State und	er the Executive Order 12372 Process for review on
b. Program is subject to E.O. 12372 but has not been so	
c. Program is not covered by E.O. 12372.	
* 20. Is the Applicant Delinquent On Any Federal Debt? (If	f "Yes," provide explanation in attachment.)
Yes No	
If "Yes", provide explanation and attach	
	Add Attachment Delete Attachment View Attachment
herein are true, complete and accurate to the best of n	nents contained in the list of certifications** and (2) that the statements my knowledge. I also provide the required assurances** and agree to aware that any false, fictitious, or fraudulent statements or claims may U.S. Code, Title 218, Section 1001)
specific instructions.	where you may obtain this list, is contained in the announcement or agency
Authorized Representative:	
Prefix: Ms. *First	st Name: Madeline
Middle Name:	140
* Last Name: Rogero	
Suffix:	
*Title: Mayor, City of Knoxville	
* Telephone Number: 865-215-2040	Fax Number: 865-215-2085
*Email: mayor@knoxvilletn.gov	
* Signature of Authorized Representative: Annemarie Wallace	* Date Signed: 12/17/2015

9			

CITY OF KNOXVILLE

MADELINE ROGERO, MAYOR



William Lyons
Deputy to the Mayor
Chief Policy Officer

R04-16-C-012

December 16, 2015

Ms. Barbara Alfano Region 4 Brownfields Coordinator U.S. Environmental Protection Agency Sam Nunn Atlanta Federal Center 61 Forsyth Street Atlanta GA 30303-8960

Dear Ms. Alfano:

On behalf of the City of Knoxville, Tennessee, I respectfully submit this application to the Environmental Protection Agency (EPA) for \$150,000 in grant funding to assist in the proposed clean-up of the former McClung Warehouses in the City's Jackson/Depot Redevelopment District. This is one of two Brownfield sites that the City is targeting for cleanup in this funding cycle. The other is the former Sanitary Laundry and Dry Cleaning facility for which we have prepared a separate grant proposal.

Over the past several years, Knoxville has been active in dealing with the issues associated with economic decline in the neighborhoods both north and south of the downtown. The City recently completed environmental assessments, utilizing EPA Brownfields Assessment funding, of multiple properties in both its South Waterfront and Downtown North Redevelopment Areas, and is seeing various redevelopment projects occurring in both sectors. One of the properties recently assessed in Downtown is the former McClung Warehouses property on which Phase I and Phase II Environmental Site Assessments were performed through a Targeted Brownfields Assessment. The property has attracted the attention of a local developer but its current condition presents a significant constraint to its redevelopment. The City acquired the property and intends to perform site clean-up with the aim of making it more appealing to private investors.

The Targeted Brownfields Assessment provided information on environmental conditions on the site and what is required to remediate those conditions. If our application is successful, we will use the grant funds to remove impacted material and replace it with clean backfill. We will also perform other related program development activities including supplemental sampling to increase information available for consideration during site redevelopment, (when considerable excavation or grading activities may be warranted to construct foundations for new structures), and address the findings in order to bring the site to the point of marketability. With a combination of funds from the EPA and the City of Knoxville, we believe we can accomplish that goal.

Sincerely.

William Lyons, Senior Director

Department of Policy and Communications

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e.		
	W.	

Appendix 3 Cleanup Other Factors Checklist

Name of Applicant:	City of Knoxville	
Name of Applicant:	City of Knoxvine	

Please identify (with an X) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Other Factor	Page #
None of the Other Factors are applicable.	X
Community population is 10,000 or less.	
Applicant is, or will assist, a federally recognized Indian tribe or United States	
territory.	
Targeted brownfield sites are impacted by mine-scarred land.	
Applicant demonstrates firm leveraging commitments for facilitating brownfield	
project completion by identifying amounts and contributors of funding in the	
proposal and have included documentation.	
Recent (2008 or later) significant economic disruption has occurred within	
community, resulting in a significant percentage loss of community jobs and tax	
base.	
Applicant is one of the 24 recipients, or a core partner/implementation strategy	
party, of a "manufacturing community" designation provided by the Economic	
Development Administration (EDA) under the Investing in Manufacturing	
Communities Partnership (IMCP). To be considered, applicants must clearly	
demonstrate in the proposal the nexus between their IMCP designation and	
the Brownfield activities. Additionally, applicants must attach	
documentation which demonstrate either designation as one of the 24	
recipients, or relevant pages from a recipient's IMCP proposal which	
lists/describes the core partners and implementation strategy parties.	
Applicant is a recipient or a core partner of HUD-DOT-EPA Partnership for	
Sustainable Communities (PSC) grant funding or technical assistance that is	
directly tied to the proposed Brownfields project, and can demonstrate that	
funding from a PSC grant/technical assistance has or will benefit the project	
area. Examples of PSC grant or technical assistance include a HUD Regional	
Planning or Challenge grant, DOT Transportation Investment Generating	
Economic Recovery (TIGER), or EPA Smart Growth Implementation or	
Building Blocks Assistance, etc. To be considered, applicant must attach	
documentation.	
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

City of Knoxville Brownfields Grant Proposal for Cleanup Funds Former McClung Warehouses Property Narrative Proposal - Ranking Criteria

1. Community Need

a. Targeted Community and Brownfields (8 Points)

Targeted Community Description

Within the heart of Appalachia, in the valley between the Cumberland Mountains and the Great Smoky Mountains, lies the City of Knoxville, in the eastern portion of Tennessee. Knoxville's industrial growth in the late 1800's sprang from its railroad connections - it was the region's busiest depot for freight and passenger traffic, and transformed Knoxville from a small river town to one of the Southeast's major wholesaling centers. Dozens of large warehouses were built along Jackson Avenue and other streets adjacent to the railroad tracks in the city's downtown, where small-town merchants from all over east Tennessee would come to purchase goods and supplies to resell at rural general stores. Textile mills, foundries, and manufacturing provided employment to thousands. In the early 1900's the economy was booming, and thriving neighborhoods grew up around the employment center of downtown. But the subsequent decline of the railroads in favor of other forms of shipping led to the collapse of the wholesale trade and distribution market. Knoxville's economy suffered during the Great Depression when construction fell 70%, and unemployment tripled. African Americans were hit hardest, as business owners began hiring whites for jobs traditionally held by black workers. The city's textile industry collapsed in the mid-1950's with the closure of several large textile mills, leaving thousands unemployed. Urban neighborhoods fell into ruin and the downtown area deteriorated. Nearly half of all houses in the city's older neighborhoods were considered substandard and in a critical state of decline. The Jackson Avenue Warehouse District in Knoxville's downtown and where our subject property is located, saw its commercial properties degraded one by one, until all that was left was a street corridor empty of viable businesses and practically deserted.

Demographic Information

Today, downtown Knoxville is seeing a resurgence of prosperity as revitalization is happening in its core. But parts of downtown and some of the surrounding neighborhoods remain disadvantaged. These neighborhoods are predominantly white, the minority population in downtown is less than the national level, although higher in the surrounding neighborhoods, and unemployment rates in Knoxville are reflective of state and national averages (5.3% vs. 5.7% TN; 5.1% U.S. – *Bureau of Labor Statistics, September, 2015*) but incomes are much lower and poverty levels are much higher as indicated in the following comparative data table. We have included statistics for downtown and also for parts of the neighborhoods that are immediately adjacent to downtown to show the disparity between areas that are seeing redevelopment happen, and areas that are still plagued with abandoned and derelict buildings. These statistics were included in a 2014, Urban Land Institute study of Knoxville's redevelopment areas whose source was the American Community Survey (ACS), 2008-2012, five year estimates.

Relevant Demographic Data							
	Downtown	Neighborhood	Tennessee	U.S.			
Population	1,796	31,438	6,353,226	309,138,711			
Minority	15%	32.9%	21.2%	25.8%			
Median Household Income	\$33,899	\$20,644	\$44,140	\$53,046			
Individuals Below Poverty Level	31.9%	48.3%	17.3%	14.9%			
No high school diploma	9.4%	19%	16.1%	14.3%			

Source: 2008-2012 American Community Survey (ACS) 5-year estimates

Description of Brownfields

Our subject property covers approximately 5 acres of land comprised of nine parcels on Jackson Avenue in downtown Knoxville and is the former location of the five McClung Warehouses which were constructed in 1893 and accommodated various business enterprises for more than 100 years. The site also housed an automobile garage, woodworking shop, a blacksmith shed, and railroad freight shipping and storage. A portion of the site is paved as an asphalt parking lot. A portion is grass covered and unvegetated soil. Rail lines run along the northwest boundary. Surrounding properties included a railroad passenger depot, machine shop, foundry, woolen mill, farm machinery business, fuel station, plus various manufacturing and commercial facilities. Three of the splendid historic McClung warehouse buildings on the Jackson Ave. site were destroyed by a fire in 2007. Another fire in 2014 consumed a fourth. The remaining structure suffered heavy damage and had to be demolished, as its unstable condition presented a safety hazard. All that remains are the concrete foundations and portions of the front shell of the warehouses. The McClung site is highly visible from Interstate 40/75 which runs through the heart of downtown Knoxville, and the once stately historic buildings are now just an ugly eyesore for the 100,000+ vehicles that travel the interstate daily. A Phase I Environmental Site Assessment (ESA) in 2015 identified Recognized Environmental Conditions (RECs) related to previous use as a railroad shop, blacksmith shed, oil and drug warehouses and automobile garage, as well as numerous suspected asbestos-containing materials in the remaining shells of the warehouses. Subsequently, a Phase II ESA performed in 2015 indicated the presence of elevated levels of toxic metals such as arsenic, cobalt, aluminum, iron, manganese, lead, vanadium and thallium in soil samples from the site, that exceed the EPA Regional Screening Levels (RSL) for industrial and residential applications. Also found was a pesticide at a concentration that exceeds the respective EPA RSL, and the chemical benzene at concentrations exceeding the EPA RSL Cancer Target Risk for residential air. Environmental dangers caused by site contaminants and their migration, groundwater impacts, surface runoff, or waste material dumped on sites, adversely impact the health, welfare and environment of people exposed to them through contact with soil, air and water. Our target property poses a health and safety risk, not only because of its condition and potential for site contaminants, but also because it is easily accessible which makes it an attractive nuisance to curious children who have been seen playing in the rubble, and it is attractive for vagrants who may present a safety threat. Forty-four facilities whose past or present operations pose the greatest risk to contributing to contamination at the subject site were identified within the ASTM recommended search distances.

Cumulative Environmental Issues

The industrial base that developed around the railroad and warehousing operations is largely long gone leaving a legacy of abandoned, derelict and polluted sites in downtown Knoxville. However, some functioning heavy industrial facilities remain including a steel mill that processes scrap metal into steel, an asphalt manufacturing facility, and a chemical processing plant. While these industries offer employment opportunities to area residents, the buildings they occupy are quite old and have been in the community for decades. Until this year Knoxville was designated a non-attainment area for ozone standards predominantly caused by vehicle pollution due to traffic volume on the network of interstates that intersect the region, (but is still non-attainment for particulates). Research by EPA indicates that most of the particulate matter from traffic on interstates is deposited in the first few hundred yards from the highway, and an eight-year study by the University of Southern California found that "Local exposure to traffic on a freeway has adverse effects on children's lung development, which are independent of regional air quality, and which could result in important deficits in attained lung function in later life." Jackson Ave. is within a quarter mile of interstate 40/75 which carries more than 107,000 vehicles per day. During rush hour, that part of the interstate is heavily congested and traffic is often at a crawl contributing to excessive vehicle pollution which is a health threat for the area. Radon is the leading cause of lung cancer among non-

smokers. Radon levels are especially a concern in Knox County where EPA identified it as an area with potentially-elevated radon levels. The risk can be avoided by installing better ventilation but lower income families are less likely to afford the fix. There is a legacy of coal mining and fossil fuel power plants in the counties that surround Knoxville. The Tennessee Valley Authority, Kingston and Bull Run Steam Plants are both located within 40 miles of our target area. In addition, several streams in Knoxville are listed as impaired by the Tennessee Department of Environment and Conservation (TDEC), including Second Creek which runs through the target area. Second Creek is on TDEC's 303d list and is posted for a water contact advisory. Surface runoff from unsecured former industrial properties have contributed to the contamination in Second Creek.

b. Impacts on Targeted Community (5 points)

Although the City of Knoxville is located in a region of particular scenic beauty, it has poor air quality, limited transportation options, a poverty rate higher than the national average, and serious health concerns including a high obesity rate, and a ranking of #7 in the country on the list of the most challenging places to live with asthma (Asthma and Allergy Foundation of America - 2015 report). The EPA released health risk data on the national-scale air toxics assessment (NATA) in 2009, which scales down to the census tract level. Air toxics are pollutants known or suspected of causing cancer or other serious health problems such as birth defects. The tracts that make up our neighborhood area are shown to have an elevated risk for cancer, neurological risks and respiratory disease. The EPA, Environmental Justice, EJView shows that women of child-bearing age in these same census tracts are at an elevated risk for low birth weight infants (who go on to have a lifetime of increased risk of health problems), and for increased infant mortality. Since our site is adjacent to a low income neighborhood with older houses, there are problems with lead-based paint, leading to an increased risk for neurological damage to resident children. ACS (2008-2012, 5-vear estimates), shows that 36.1% of housing in the adjacent neighborhood is more than 65 years old compared to the rest of Tennessee at 6.7% and the national average of 13.7%. Based on a combination of age of housing and data on patients' blood lead levels over the past several years, the Knox County Health Department determined that neighborhoods adjoining our subject site have the highest risk of elevated blood lead levels in Knoxville children - 50% or higher in families in poverty, 60% or higher in families occupying older homes and 80% and higher in minority families.

East Tennessee is located in the heart of Appalachia which has historically experienced a poverty rate higher than the national average and an education level lower than the national average. The demographic table shows our target neighborhood has an income level far below the state and national average, and while poverty and lower education levels do not in themselves cause adverse health conditions, residents have limited access to preventive and pre-natal health care and medical services, in part due to limited transportation options to access these facilities. Jackson Ave. is adjacent to where most of the social service organizations are headquartered and where most of the homeless congregate, which presents a safety concern for them and for others if they shelter in abandoned buildings in the neighborhood. There is far more likelihood of illegal activity, injurious trash and vandalism in these locations.

The property that will be cleaned up under this grant was first developed in 1893 when the first of the McClung Warehouses was constructed. Subsequently, more warehouses occupied the site, as well as railroad-related facilities, blacksmith shed, automobile garage, woodworking shop and various other commercial enterprises. These former uses have left a legacy of metals and potential petroleum contamination, as well as asbestos-containing materials (ACM). The fires that consumed the buildings illustrated the worst-case scenario for vacant and blighted historic buildings. Five historic buildings were lost, at least hundreds of thousands of dollars in damage was caused, and one thriving business owner lost

everything and was displaced. The condition of the property impacts the target community in several ways. It poses a threat to public health and the environment because of the elevated levels of toxic metals, pesticide and benzene in soil and soil gas samples taken from the site, because of the remaining shells of the warehouses that contain asbestos, and because of the safety issues associated with its appeal to homeless people and children. Moreover, it is a large tract of land (approx. 5 acres) in the heart of Knoxville's city center that is a blight in the community that adversely impacts efforts to revitalize the area.

c. Financial Need (7 points)

i. Economic Conditions (3 points)

Knoxville has invested heavily in community improvement projects and, like most cities of its size, there are multiple public improvement projects occurring at any given time. Just within the Office of Redevelopment, twelve neighborhood improvement projects are ongoing, and for these projects alone, the City has committed approximately \$45 million in funding. While the City recognizes the importance of providing funding for improvement projects, and has done so to the best of its fiscal ability, there is a limit on available funds as regular city services must be maintained despite fiscal constraints. Within the past few years, the Knoxville News Sentinel reports company closures in Knoxville have included ARC Automotive (51 jobs lost), Image Point (270 jobs lost), Brunswick Boats (765 jobs lost), RockTenn (88 jobs lost), PBR Automotive (225 jobs lost), Jewelry TV (150 jobs lost), plus many more smaller company layoffs. In addition, two companies plan to close before the end of this year - Rocore (50 jobs) and Community Health Partners (148 jobs). Not only do these closures reduce tax income for the City, they adversely impact local retailers such as office supply stores, copier services, janitorial services etc. whose goods and services are no longer required at the closed businesses. The City invested more than \$1.4 million to acquire the McClung warehouse properties from a previous owner who had left them vacant and unused for more than 20 years then went bankrupt. The City has also incurred significant costs in responding to two major fires at the properties. As is typical in once-thriving, inner city areas, job losses from the closure of local facilities resulted in less money to spend on home maintenance, resulting in depressed property values and lower property tax revenue for the City. While the economy is improving since the market crash in 2007, lending is still not up to pre-2007 levels which makes private developers cautious to invest. The City of Knoxville cannot afford to cover the complete cost of cleaning up its brownfields sites in order to satisfy developers. However, the City is willing to invest significant funding into brownfields cleanup as a partner in redevelopment, and therefore is looking to the EPA and other resources, including private investors, to partner in this cleanup and redevelopment initiative.

Economic Effects of Brownfields (4 points)

The economic impact of Brownfields on the targeted community is evidenced by the sheer number of Brownfield properties in and around our target area – 80 were identified in a recent inventory in the adjacent Downtown North area - as well as the obvious lack of upkeep to many of the homes in the surrounding neighborhoods. The Jackson Avenue District was heavily populated with industrial and commercial properties. Closure of these productive facilities meant a large decrease in tax revenue, both in property taxes (if the property is abandoned with no evident owner) and sales tax revenue. Very few municipalities can sustain comprehensive services with less income. Adjacent to Jackson Ave., there are several historic neighborhoods where homes have been bought by younger families who are attempting to restore them, but the preponderance of homes around the more industrial parts suffer from a lack of maintenance. The fundamental reason for this is the lower incomes of most of the residents. The Bureau of Labor Statistics shows unemployment rates in Knoxville are reflective of the U.S. average (5.3% vs. 5.1%), but the household income in our target area (from a low of \$7,390 to a high of \$33,899) is substantially less than the U.S. median (\$53,046). The closure of local industries and their relocation to the City's urban

fringes or to neighboring counties has resulted in job losses in the neighborhoods, and created an additional problem related to transportation. Knoxville has limited transportation options, which means that residents of downtown neighborhoods in many cases, must rely on automobiles to get to work, which increases their burden of costs and contributes to air pollution. They face a similar situation for shopping and activities associated with normal daily activity. Often the additional economic burden of transportation costs to reach the employment and commercial centers are more than a household income can tolerate. Additional income and poverty statistics from the ACS, Population and Housing Narrative Profile 2009-2013 indicate that 21% of Knoxville households had an income below \$15,000 per year, and 33% of related children under 18 were below the poverty level, plus 16% of all families and 43% of families with a female householder and no husband present had incomes below the poverty level. As mentioned, our target area is where the homeless congregate and often use abandoned buildings for illegal activities. The Knoxville police are called frequently for assistance for negative activities associated with homeless issues/predators of the homeless population (i.e. drug dealers, etc.) and they have increased patrolling for prostitution stings in the neighborhood, all of which increases policing costs and adversely affects the local economy.

2. Project Description and Feasibility of Success

a. Project Description (15 points)

i. Existing Conditions (5 points)

The former McClung Warehouses site on Jackson Avenue spans approximately 5 acres of prime property in downtown Knoxville. Two major fires in 2007 and 2014 destroyed four of the historic buildings and severely damaged a fifth which had to be demolished. Portions of the front shells of the buildings are all that remains, along with a paved parking lot. After the 2014 fire, the City applied to the EPA for a Targeted Brownfields Assessment to determine the extent of contamination on the site from past use of the property, and determine the best path towards redevelopment. In 2015, EPA contracted with an environmental consulting firm, to perform Phase I and II ESAs. Contamination identified in the Phase II report includes metals and petroleum in the soil and soil gas, consistent with the former uses of the site. Asbestoscontaining materials were observed in the remnants of the warehouses. Since the City of Knoxville acquired the property after the previous owner declared bankruptcy, its reuse has been the subject of much discussion, both in public forums and within the City's Office of Redevelopment. The City directed Knoxville's Community Development Corporation (KCDC) to create a Jackson/Depot Redevelopment & Urban Renewal Plan. On April 3, 2014, the City of Knoxville held a public meeting for all interested parties to participate in a visioning session or charrette process for the West Jackson Avenue Corridor. Approximately 100 members of the community attended the meeting and provided input on how they would like to see the property reused. The City heard recommendations for a variety of uses including residential, retail, commercial and recreational. The City plans to take the ideas put forward during the public hearing. in coordination with recommendations from an Urban Land Institute study of the Jackson Ave. Corridor, and craft an RFP that will encourage private developers to respond to the desires of the community, and in accordance with KCDC's redevelopment plan. The City would like to see the property developed for mixed use as commercial and residential. This is in keeping with the regeneration of other properties in the target area that have undergone redevelopment in recent years.

ii. Proposed Cleanup Plan (10 points)

The purpose of cleaning up the former McClung Warehouses property is to encourage private investment in a property that is centrally located in Knoxville's downtown. EPA contracted with an environmental consulting firm, to perform Phase I and II ESAs, as well as an Analysis of Brownfields Alternatives (ABCA). The ABCA outlines alternative methods for addressing environmental concerns identified, and breaks the areas of concern into three issues – Surface and Subsurface Soils, Asbestos-containing Materials and,

Vapor Intrusion. For each of these three issues, the ABCA presents two options. Option #1 for each of the issues is No Action but that is not effective in controlling or preventing residents from coming into contact with contamination at the site. If the City of Knoxville is successful in its grant application, it will use the \$150,000 grant funds, along with its \$30,000 match to perform the cleanup methods recommended as Option #2 for each of the three issues. In addition, the City also plans to conduct supplemental assessment activities prior to initiating the cleanup. The Phase II ESA performed by EPA's environmental contractor provided discrete sampling information to generally characterize the site. An environmental consultant for the City has recommended supplemental sampling to increase the level of information available for consideration during site redevelopment, when considerable excavation or grading activities may be warranted to construct foundations for new structures. Prior to initiating grading activities, a passive soil gas survey across the site has been recommended as a general site screening tool. Based on the site's historic uses, its proximity to the railroad, and the City's experience during other local Brownfield redevelopments, efforts to identify potential unknowns before grading begins can reduce risk and tailor site design to address environmental conditions. If the passive soil vapor survey identifies areas with elevated soil vapor readings, samples will be collected in an effort to determine the source of the soil vapors. The City has included limited funding within this application to address additional impacted areas, if identified during the supplemental sampling. For Surface and Subsurface Soils, cleanup will involve localized removal of contaminated materials from some portions of the site. Based on EPA's removal criteria for residential properties, the contaminated soil would be removed and appropriately disposed as Special Waste within a Class I Landfill. The excavated areas would then be backfilled with clean material. For Asbestos-containing Materials, cleanup will involve removal and disposal of these materials by a licensed, qualified asbestos contractor. For Vapor Intrusion, additional vapor intrusion assessment may be warranted based on the passive soil gas survey findings, especially if the end use of the property is residential. This will involve collecting ambient air and soil gas samples. If samples exceed the calculated vapor intrusion screening level for residential air, source soils as determined through additional characterization will be excavated and transported for disposal at approved facilities, and replaced with clean backfill. Soil removed from any parts of the site would be adequately characterized and, based on the findings, handled in accordance with local, state and federal regulations. Prior to any site excavation, there will be a TDEC-approved Soil Management Plan (SMP) for characterization, handling and disposal of excavated materials. The ABCA, included with this grant proposal, discusses anticipated costs for each of the action alternatives.

b. Task Descriptions and Budget Table (10 points) <u>Task Descriptions</u>

Community Outreach (\$3,300) - This task includes publicity, meetings, and distribution of information to the public as the project progresses. Public/neighborhood meetings will be held at the start and end of the project. We will produce a quarterly progress update to be included in existing community newsletters throughout the duration of the project. This update will be included in an existing Central Business Improvement District newsletter at no charge to the project. Supplies needed for public meetings might include printed handout materials, etc. (2 mtgs. @ \$150 = \$300) and the contractor would be required to prepare visual presentations of progress reports and attend all meetings to discuss project procedures and answer technical questions (2 staff/2mtgs. report preparation and presentation @ \$1,500/mtg. = \$3,000)

<u>Program Development & Management (\$5,000)</u> – This task includes documenting guiding principles and procedures, establishing priorities for site remedial actions, and EPA-required performance reporting (e.g. quarterly reports, MBE-WBE reports, final closeout report and ACRES database reporting) (\$3,000). Travel

costs in this budget task would be used for attendance at regional Brownfields grantee workshops and the National Brownfields conference (2 staff @ \$1,000/conference = \$2,000)

Additional Assessment (\$20,000) – This task includes a passive soil gas survey across the site, recommended as a general site screening tool before redevelopment grading activities occur (\$14,000), along with supplemental quantitative environmental media sampling to characterize areas that may detect elevated soil gas concentrations (\$6,000).

Remedial Planning & Design (\$30,000) – This task includes the outputs of finalizing the ABCA (\$1,000), coordinating with TDEC on a Brownfields Voluntary Agreement, Soil Management and Health & Safety Plans (\$4,000) and further evaluation of the current, documented site conditions from the Phase II ESA, to determine what materials need to be properly characterized and disposed of (\$10,000). This task also includes design of vapor intrusion system(s) as warranted to address the potential residential use of the site. The design will be based on the Phase II ESA findings, the supplemental sampling results, and the proposed site layout to the extent this information is available at the time of remedial planning (\$15,000).

<u>Cleanup Activities (\$121,700)</u> – This task includes anticipated contractor costs for removal and disposal of contaminated soils and replacement with clean backfill as well as ambient air and soil gas sampling. For preliminary budgeting purposes we assume the following:

- Metals Contamination soil removal and offsite disposal @ \$60 \$75 per cubic yard (estimate \$59,000);
 purchasing and transporting approx. 790 cu. yd. clean backfill @ \$25 per cubic yard (estimate \$20,000)
- Removal of Petroleum Hydrocarbon or Volatile Organic Compound Impacted Soils soil removal and offsite disposal @ \$60 \$75 per cubic yard (estimate \$20,000); purchasing and transporting clean backfill @ \$25 per cubic yard (estimate \$5,000)
- Asbestos-Containing Materials removal and disposal of approx. 3,000 sq. ft. @ \$2.00/sq. ft. (\$6,000)
- Vapor Intrusion 6 ambient air and 6 soil gas samples collection and testing (\$5,200); drilling (\$6,500)

Budget Table

	Budg	et for former McC	lung Warehous	ses Cleanup P	roject		
Budget Categories	Project Tasks						
	Community Outreach	Program Development & Management	Additional Assessment	Remedial Planning & Design	Cleanup Activities	Total	
Personnel						Lancard Co.	
Travel		\$2,000				\$2,000	
Equipment							
Supplies	\$300					\$300	
Contractual	\$3,000	\$3,000	\$20,000	\$30,000	\$121,700	\$177,700	
Other							
Total Federal Funding		\$5,000	\$15,000	\$20,000	\$110,000	\$150,000	
Cost Share	\$3,300		\$5,000	\$10,000	\$11,700	\$30,000	
Total Budget	\$3,300	\$5,000	\$20,000	\$30,000	\$121,700	\$180,000	

c. Ability to Leverage (5 points)

The Office of Redevelopment oversees projects that contribute to the enhancement of community livability, and has worked diligently to leverage local dollars for a variety of state and federal funding sources as well as private investment. The City was successful in applying for two \$400,000 EPA Brownfields Assessment Grants to assess properties in two of its redevelopment areas. This funding, along with local funds being used for public infrastructure improvements, has led to more than \$200 million in private investment from developers and business owners, and tens of millions of dollars in leveraged funding from federal and state sources. Private sector interest and investment in the downtown area close to Jackson Avenue is strong. Several former underutilized properties have been converted into loft apartments with street level restaurants and specialty shops. The City wants to capitalize on that interest and draw on available funding resources to spur redevelopment in all of its designated redevelopment areas.

Examples of a few recent Office of Redevelopment community improvement projects in downtown that have leveraged public and private funding include:

- North Central Street Transportation Improvement \$2.5M project utilizing Department of Transportation, Surface Transportation Funds (STP) (80/20 match) the City has committed \$825,000 for sidewalk repair, landscaping, and street resurfacing; and Knoxville Utilities Board (KUB) will fund \$750,000 for water line replacement; status ongoing
- Marble Alley Lofts (redevelopment of former surface parking lot in Downtown) \$21.6M private investment; \$1M for streetscape improvements in local funds; status - ongoing
- Jackson Ave. (3 separate projects) \$750,000 STP funds; \$5-10M federal bridge funds; \$500,000 local funds – streetscape/roadway/bridge improvements; status - ongoing
- I-275 Business Park Access Improvements \$5.5M High Priority Project utilizing DOT funding (80/20 match) TDOT \$4.4M; City \$1.1M. This corridor study was initiated in 2007/2008; all plans, environmental reviews and final designs were completed by 2014; status in Right of Way acquisition
- Cumberland Ave Corridor \$17.5M streetscape + \$3.5M for design and right of way STP funds (80/20 match); KUB will provide \$5M to upgrade gas, water and sewer lines; status ongoing
- Façade Improvement Program Eligible property owners in the redevelopment districts can receive up to \$50,000 for façade improvements to their buildings with the property owner providing a 20% match – ongoing (138 buildings since the program began)

3. Community Engagement and Partnerships

a. Plan for Involving Targeted Community and Other Stakeholders; and Communicating Project Progress (5 points)

The City of Knoxville makes every effort to engage local citizens in plans for projects in their neighborhoods in order to make full use of citizens' ideas and opinions in considering investment of public funds. In the spring of 2014, City officials asked for public input on how to proceed with reshaping our subject site. About 100 people - potential developers, downtown and Old City property owners, residents and advocates - came to the public forum. Even more people mailed in comment cards or shared their ideas over several weeks in an online survey. A large number of the commenters said they wanted mixed-use redevelopment - buildings for residential and commercial retail uses, with parking. (Underground parking was touted; alternatively, an idea of an elevated green space with parking below it was also proposed.) "Connectivity" was a common theme. Many people told City officials that they wanted a greenway and bicycle trail that connected the Old City with World's Fair Park. A path following the railroad was backed by some; others said they were supportive of a trail along Jackson Avenue so long as it avoided the sharp ups and downs of the street viaducts in order to be attractive to walkers and riders. Other ideas ranged from creating a public

event space, to reinforcing and extending the adjacent South Gay Street arts district, to maintaining and capitalizing on the "urban chic" feel of being a former warehouse district with close proximity to railroad tracks. Dozens of other suggestions were proposed and discussed for the tract. Officials emphasized that there was no preconceived starting point or plan for West Jackson Ave., and that public participation is vital in defining how the corridor will be redeveloped. Throughout the recent community wide brownfields assessment project in adjacent Downtown North, the City held quarterly public meetings to inform residents of the project's progress. Meetings were publicized on the City's website and held in a location central to the project area. A quarterly newsletter providing details about the assessment activities was published on the City's website, distributed to local libraries, and sent via email to interested citizens. If the City's grant application for cleanup funding is successful, the City will similarly involve the public, and in particular, the target neighborhood's residents, in the decision-making for the reuse of the site and its appropriate cleanup. Naturally, the area's residents will have concerns related to cleanup activities, particularly as they might affect sensitive populations. The City and its contractor will explain the measures that will be taken to provide health and safety protections to the neighborhood during cleanup and construction activities. If impacted materials or soil vapors are encountered during remedial activities, appropriate monitoring would be performed to document site conditions, and precautions taken to reduce exposure potential.

The policy of the City is to ensure meaningful communication with persons that experience Limited English Proficiency. The primary language in the area is English, and the City has not been requested to communicate in another language. However, should that need arise there are available resources at the University of Tennessee, Knoxville which houses the Center for International Education, and also the Hispanic Chamber of Commerce, located in Knoxville.

b. Partnerships with Government Agencies (5 points)

Throughout the Brownfields Assessment projects that the City of Knoxville has successfully completed, the Tennessee Department of Environment and Conservation has been a strategic partner in lockstep with the City to aid in determining the extent of contamination of selected properties targeted for assessment. Funding to assess both hazardous and petroleum contamination sites required working closely with several TDEC personnel in the relevant local field offices, as well as the Brownfields Program Manager in TDEC's Nashville headquarters, to make sure that all appropriate guidelines and rules were being followed. TDEC personnel attended public meetings and committee meetings, and were included in all correspondence related to the assessment projects. TDEC has worked with the City in preparing Brownfields Voluntary Agreements for properties identified and targeted for redevelopment. The City will work with TDEC to construct a Brownfields Voluntary Agreement for the McClung Warehouses site.

The Knox Co. Health Dept. is physically located close to the target area and provides health services to neighborhood residents. The Health Dept. hosted several public meetings to engage the community in the redevelopment planning for adjacent Downtown North and will be a public site for project progress bulletins.

c. Partnerships with Community Organizations (5 points)

While there are several community-based organizations that support the project, there are four that have already played a noteworthy role, and have committed to continuing their active involvement.

Knoxville's Community Development Corporation (KCDC) is the housing and redevelopment agency for the City. For nearly 70 years, KCDC has enhanced the quality of life for the citizens of Knoxville by providing safe, decent and affordable housing, advancing redevelopment initiatives, fostering self-sufficiency, and improving neighborhoods and communities. KCDC administers more than \$6 million annually in

redevelopment and community and neighborhood revitalization, and is responsible for numerous neighborhood improvement projects including developing two new grocery stores, medical office complexes, and more than 100 new housing units. KCDC produced the Jackson/Depot Redevelopment and Urban Renewal Plan to address critical issues affecting the area including: economic development, particularly on older, often vacant, industrial properties; conservation of historic resources, especially historic properties in the downtown neighborhoods; improving multi-modal transportation including sidewalks and bicycle facilities; new land use opportunities on underutilized and vacant properties offering mixed-use development; and enhancement of environmental and recreational systems including the Second Creek greenway that runs through the area. KCDC will continue its role as redevelopment agency to support the implementation of the Jackson/Depot Redevelopment and Urban Renewal Plan.

The Development Corporation of Knox County (TDC) is a non-profit organization committed to fostering the long-term, quality growth of the region's business environment. As the property owner and manager of six business parks located throughout Knox County, TDC is focused on maintaining a sufficient inventory and diversity of properties to meet the needs of new and expanding businesses. In 2004, TDC, on behalf of Knox County, applied for, and received, an EPA Brownfields Assessment grant to assess a 19.4-acre derelict property - the former Brookside Knitting Mill, which had become an attraction for indigent people, and presented a safety hazard in the community. EPA Brownfields funds were used to assess Brookside Mills, local government funds were used to clean up the property, and a Brownfields Voluntary Agreement with TDEC was enacted in 2007. The site was purchased and redeveloped by a local businessman and now houses the corporate offices of Holston Gases. TDC understands the role of Brownfields in industrial and commercial development and actively promotes job creation opportunities for the area and partners with the City and Chamber of Commerce to market properties for development. TDC's Executive Vice President served on the Knoxville South Waterfront and Downtown North Brownfields Committees and helped guide the City in the prioritization of brownfield sites for redevelopment. It is anticipated that he will perform a similar role for the Jackson Avenue cleanup.

East Tennessee Community Design Center (ETCDC) is a non-profit organization that works with community groups to facilitate positive change in economically distressed communities through the pro bono contributions of area architects, landscape architects, planners, and other professionals. This network of community volunteers donates over 2,000 volunteer hours annually which leverage five times their value in improvements and services. ETCDC provides schematic design of structures including land use planning and landscape design, blight removal, and visual enhancement programs. Examples of neighborhood stabilization projects include parks, community centers, housing rehabilitation planning, blighted property identification, making facilities accessible to persons with disabilities, adaptive reuse of historic properties, and facilitation of public and community input visioning to stimulate quality economic and community growth. ETCDC partnered with the City in the creation and implementation of its facade improvement program which provides incentives to business owners to renovate their building facades, and on a study for the adaptive reuse of Oakwood Elementary School which ceased as an educational facility in 1996 and fell into disrepair. ETCDC developed a public involvement process to assist in the study and gather input from the neighborhood regarding the old school's redevelopment. The school has since been redeveloped into an assisted living facility. Currently, ETCDC is partnering with the City and the Broadway Corridor Task Force (Broadway is adjacent to our subject property) to consider ways to improve the corridor for businesses as well as adjacent neighborhoods. The ETCDC hosted a design charrette in the neighborhood in November 2015 to gather input from all interested local businesses, residents and organizations, and will continue to work with the City as it moves forward with cleanup and redevelopment of blighted properties.

St. John's Lutheran Church is a historic Lutheran church located on Broadway. Individuals from the Church's Outreach Team volunteer their time to support several local programs including: Habitat for Humanity — church members provide labor and funding to build a house every other year. Family Promise of Knoxville and Knox Area Rescue Ministries - St. John's sends a team of volunteers to cook and serve meals to the poor and homeless families. The Senior Nutrition "Mobile Meals" Program - St. John's volunteers serve two of the routes within our target neighborhood and also check on the meal recipients, reporting any health or safety concerns to the Knoxville-Knox County Community Action Committee Office on Aging for follow-up. KIDS HOPE USA — trained St. John's volunteers develop mentor relationships with at-risk public school children spending one hour a week with carefully matched students at an elementary school in the target neighborhood. St. John's Lutheran Church provided meeting space at no charge to the City of Knoxville for quarterly public meetings held throughout the duration of the Downtown North Brownfields Assessment and will make its facility similarly available for this project.

4. Project Benefits

a. Health and/or Welfare and Environmental Benefits (10 points)

i. Health and/or Welfare Benefits (5 points)

Pollutants from industrial waste and toxic chemicals are considered harmful to humans who are exposed to them through contact with soil, air and water. Sensitive populations such as children, pregnant women and the elderly are at particular risk as their immune systems may be less resistant. The property that will be cleaned up under this grant was first developed in the late 1800's and housed a variety of commercial operations as well as railroad facilities. The Phase II ESA identified soils contaminated with heavy metals and petroleum products as well as asbestos-containing materials. These contaminants plus evidence of previous use by homeless individuals all combine to present a threat to the health and welfare of the neighborhood. This threat will be eliminated when the property is cleaned up, secured, and redeveloped into an asset for the community. Contaminated soils will be removed and clean fill put in place to prevent people from coming into contact with toxic substances. ACM will be removed which will prevent exposure to contaminated materials. Cleanup of the property will stimulate interest from private developers who have redeveloped several adjacent properties into successful residential and commercial enterprises. The mixed-use vision that the City has for the site will provide residents of adjacent underserved neighborhoods access to employment opportunities resulting in a better standard of living, as well as the ability to walk to employment, dining and shopping to encourage exercise thus leading to a healthier lifestyle.

ii. Environmental Benefits (5 points)

Soil removal will reduce the potential for surface runoff that likely contains pollutants such as chemicals and oil, to enter storm drains and ultimately end up in rivers and streams which can contaminate drinking water. Waste material dumped on the site breaks down over a period of time and can release chemicals into the soil and the air. Removing waste material from the site will remove this threat from the environment. As stated, site cleanup will lead to redevelopment and most likely offer employment, dining and shopping opportunities for local neighborhood residents. Potentially, this will allow some of these residents to walk to work instead of having to drive, or walk to the retail establishments which in turn, reduces vehicle emissions that contribute to unhealthy air. All of these benefits contribute to a healthier environment.

b. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse (5 points)

i. Policies, Planning or Other Tools (2 points)

At the beginning of her administration, Knoxville's Mayor Madeline Rogero outlined four major goals:

◆Strong, safe neighborhoods; ◆Living green and working green; ◆An energized downtown; ◆Job creation and retention. These goals guide the City's budget and operations. Its Energy & Sustainability Initiative has

helped make Knoxville a greener, more sustainable city that promotes sustainability by embedding support for low-impact design and alternative transportation options into how it designs and manages public infrastructure, and integrates sustainability principles into actions like street design, utility infrastructure planning and maintenance. Conserving resources and saving energy makes basic financial sense. The City is implementing sustainable development strategies such as: the Solar America Cities Program; Leadership in Energy and Environmental Design (LEED) certification for the new Downtown Transit Center; energy efficient building practices for low-income housing programs, and more. Downtown has full access to all public utilities and wherever possible, these existing utilities will serve new facilities. As derelict structures are demolished, the practice is to recycle demolition materials whenever possible -- as advocated in City policy, and done on other brownfield demolition sites where useable materials have been recovered rather than transported to a demolition landfill.

ii. Integrating Equitable Development or Livability Principles (3 points)

The City has embraced the six livability principles established by The Partnership for Sustainable Communities and set up specific programs and/or plans to further equitable development. In 2015, City officials hosted representatives from Smart Growth America to introduce concepts related to transit oriented development which promotes a mixture of housing, office, retail and/or other amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation. This ties into the Jackson/Depot Redevelopment and Urban Renewal Plan and the Urban Land Institute study calling for an integrated mixed-use area with visual, pedestrian, vehicular and land use connections working together. Connecting currently disconnected streets and enabling pedestrian, cycling and public transit options for access to employment, schools, and shopping will decrease vehicular miles traveled, thereby reducing greenhouse gas emissions and benefiting health.

Knoxville's housing programs are targeted at improvement and construction of affordable housing, homebuyer assistance, and repair and rehabilitation to reduce the number of substandard rental and owner-occupied residential properties. The four main components are: Downpayment Assistance Program - through federal grant funds, the City supports new construction and rehabilitation projects for affordable housing; Owner-Occupied Home Rehabilitation - funds are available for owners to rehabilitate substandard residential properties; Rental Rehabilitation Program - provides financial and technical assistance to owners of substandard residential rental property. In return, property owners agree to certain long term rent and occupancy restrictions to keep the housing affordable to lower-income tenants; Blighted Property Redevelopment Program - provides short-term development and construction financing through subsidized loans to redevelop and renovate unoccupied residential dwelling units.

The City's Equal Business Opportunity Program is an outreach program aimed at increasing minority, women and small businesses' participation in the City's procurement process for construction, goods and services. Every effort is made to encourage disadvantaged businesses to provide services on City projects.

Three Rivers Market, Knoxville's Community Food Co-op, is a customer-owned cooperative, and center of sustainable commerce that benefits members and the community by creating and nourishing a healthier environment, healthier people, and a healthier community. It strives to provide the very best local, organic, and healthy food available. The Co-op represents a three-million dollar investment in a former abandoned facility within a mile of our subject site and within walking distance of low income neighborhoods. The City provided gap financing to relocate and expand the business.

c. Economic and Community Benefits (long term benefits) (5 points)

i. Economic or Other Benefits (3 points)

Economic benefits are already being realized from new retail and commercial establishments that have turned former underutilized properties into successful business ventures and created employment opportunities for local residents. Those benefits will increase considerably when the McClung Warehouses and other brownfield sites are cleaned up and become once again productive properties. One of the obvious benefits is the increased tax base for the City of Knoxville. The vision for the Jackson Avenue district is a mixed-use community including office, commercial, cultural and residential use. A report titled Reclamation and Economic Regeneration of Brownfields, compiled by E.P. Systems Group, cites a study of brownfield project economic features which found that cleanup costs averaged only 8% of total project costs, and every \$1 of public sector financing invested leveraged an additional \$2.48 in private dollars. On the Knoxville local level, a former railroad repair facility adjacent to the target area became the home of Sysco Corporation, a 250,000 sq. ft. food distribution facility that employs over 300 people. An article in the Knoxville News Sentinel noted that "Sysco's \$50M capital investment was shown to yield an economic impact in Knoxville of \$91M via the various businesses involved in building the project." The Sysco site is approximately 44 acres. The Development Corporation of Knox County (TDC) estimates the property tax revenue from Sysco at approximately \$15,000 per acre, per year. TDC also estimates that 5-10 new jobs are created per acre of industrial property developed. The estimated 5 acres of the McClung site could yield as many as 50 new opportunities for employment for local citizens. That number may seem insignificant compared to redevelopment of a large site into a major employment center, but to the residents of the poorer neighborhoods in the area, that can represent a big change in the incomes of many families. An increase in employment generates an increase in spending. It means houses will be maintained, which leads to money spent on supplies needed to make the improvements. It means disposable income to spend in retail establishments and restaurants in the neighborhood. It improves the economy, and it leads to neighborhood stability which is desperately needed in our underserved neighborhoods.

ii. Job Creation Potential: Partnerships with Workforce Development Programs (2 points)
Knoxville-Knox County's Community Action Committee (CAC) provides job training through its Workforce
Connections, which is responsible for the development and operation of a variety of programs focused on
employment assistance, related training and support. Of note are two programs that focused on
environmental training. Eight unemployed workers were trained for 'green' jobs as weatherization auditors
to perform energy audits of homes to find and correct deficiencies, e.g. sealing leaks around windows and
doors etc. Of the eight that were trained, five found permanent employment and two started their own
businesses providing energy audits. The second training of note relates to the environmental cleanup of
contaminated sites at the Department of Energy facilities in Oak Ridge, located 20 miles from Knoxville.
Through the Workforce Investment Act, Workforce Connections received funding and developed a program
to train environmental technicians. The training was conducted by the International Chemical Workers
Union and covered hazardous materials handling, Hazardous Waste Operator Training and Emergency
Response certification, and Occupational Safety and Health Administration (OSHA) construction
certification in asbestos, mold and lead. CAC is located adjacent to our target area and therefore well
positioned to provide training to the underserved citizens of the downtown neighborhoods.

5. Programmatic Capability and Past Performance

a. Programmatic Capability (12 points)

The City of Knoxville's Office of Redevelopment employs a full-time Director of Redevelopment who is assisted by a Deputy Director and project management staff. The Deputy Director is Ms. Anne Wallace who

has managed, and is currently managing, multiple community redevelopment projects. Ms. Wallace oversaw all technical, administrative and financial requirements of two recently-completed \$400,000 Community-wide Brownfields Assessment Projects funded by the EPA - the Knoxville South Waterfront and Downtown North. Ms. Wallace coordinated with the City's Law Department to develop an access agreement for Brownfields property owners, and with the Finance Department to facilitate drawdown of grant funds. She reviewed and approved all EPA-required reporting and all community outreach communications. Ms. Wallace maintained constant contact with the environmental consultant to remain fully engaged in every task associated with the projects. Under her management, both projects were successfully completed, and redevelopment is happening in both project areas - the South Waterfront is undergoing a very large, mixed-use development of the three-mile waterfront with approximately \$185M in private investment, while Downtown North is seeing infill development of specialty retail and commercial businesses in keeping with the character of the neighborhood. Ms. Wallace has been an invited speaker to give presentations on these project successes at several environmental conferences and workshops. She will manage the cleanup of the McClung Warehouses property. The entire Redevelopment Office staff becomes involved in the various projects so that each is familiar with the project goals and milestones. If employee turnover should occur, another staff member will be knowledgeable enough to fill in until a replacement can be found. While Ms. Wallace will manage the project, the design and implementation of the appropriate remediation procedures will be contracted out to a qualified environmental consultant and contractor. The City has a standard procurement process in place through the City's Purchasing Department to hire the best qualified environmental consultant. The procurement includes a Request for Qualifications published in the local newspaper and on the Purchasing Department's website, a thorough panel review of all submitted qualifications packets, candidate firm interviews if appropriate, and subsequent contract negotiations.

b. Audit Findings (2 points)

The City of Knoxville has been the recipient of multiple federal and state grants which it has administered successfully. The City's Department of Finance maintains strict adherence to grant compliance procedures so that all appropriate funds were drawn down and there were no adverse audit findings.

c. Past Performance and Accomplishments (6 points)

i. Currently or Has Ever Received an EPA Brownfields Grant (6 points)

1. Compliance with Grant Requirements (3 points)

In 2009, the EPA selected the City of Knoxville for a \$400,000 community-wide hazardous substances and petroleum grant for the South Waterfront Redevelopment Area. The Work Plan consisted of five major tasks which proceeded smoothly and successfully so in 2011, the City was awarded an additional \$400,000 in EPA Assessment funds for a community-wide hazardous substances and petroleum grant in our target area of Downtown North. This Work Plan had four major tasks: (1) Project Management and Reporting; (2) Public Involvement and Engagement; (3) Site Inventory and/or Characterization; and (4) Cleanup Planning and Institutional Controls. EPA decided to tag the Downtown North grant to the South Waterfront grant so both were ongoing at the same time. Both projects were completed within the allotted performance period. All grant compliance activities were completed on time including quarterly reports, MBE-WBE reports, and ACRES online database reporting. All field work was completed, all reports finalized, and all relevant data entered into ACRES prior to the grant closeout deadline of September 30, 2014. All deliverables (Phase I & II Reports, QAPPs, Asbestos/Lead Based Paint Reports) were sent in electronic format to EPA and TDEC. In addition, all deliverables were sent to the EPA Project Manager as hard copies. Approximately \$4,200 of the \$800,000 grant funds were not drawn down.

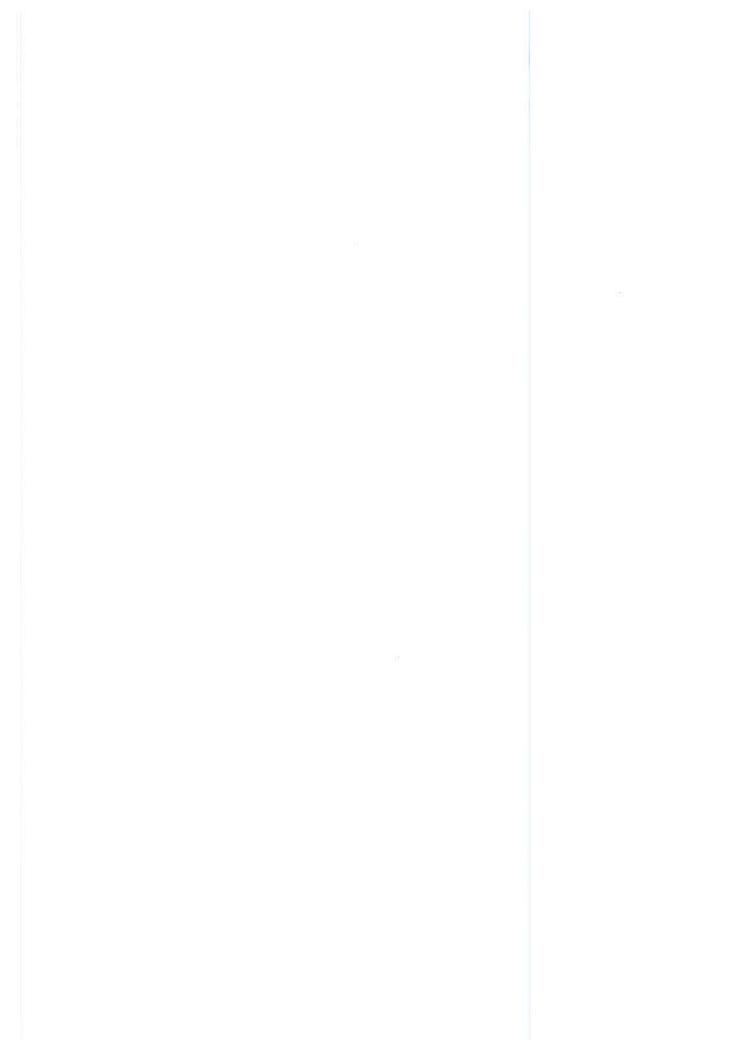
2. Accomplishments (3 points)

South Waterfront Brownfields Assessment – An inventory of potential Brownfield sites was conducted. Thirty hazardous substance sites and twenty-one eligible petroleum-contaminated sites were considered for evaluation. After careful evaluation of each site's redevelopment potential, twelve were identified as the best candidate sites for redevelopment including six parcels that comprised the former Baptist Hospital campus. After negotiations with the property owners, Phase I ESAs were conducted on the twelve sites and subsequently, seven Phase II ESAs were performed. Of those seven sites, one has become part of a new riverfront road construction, one became an extension of the Cityview Riverwalk whose construction is now complete, two are being marketed for development and the final three are former Baptist hospital parcels. The former hospital is currently undergoing redevelopment into restaurant, retail, office, commercial and residential use with a public plaza – a \$165M private investment. Regal Entertainment has also just announced that it will locate its new corporate headquarters on a portion of the former hospital site. Throughout the duration of the Brownfields Assessment project, the City published a quarterly newsletter updating area residents on all of the redevelopment activities proposed or happening on the South Waterfront.

<u>Downtown North Brownfields Assessment</u> – Prior to receiving the Brownfields Assessment Grant, the City had conducted an inventory of potential Brownfield sites that identified 80 Brownfields properties. Sixteen were considered as having the best redevelopment potential and after property owners were approached for access, seven Phase I and six Phase II ESAs were performed. Of the six sites assessed, one is currently being redeveloped into 100 units of independent living for senior citizens, one has been purchased by a local businessman for future mixed-use development and the remaining four are ready to be marketed for redevelopment. Quarterly update meetings were held in the neighborhood for the Brownfields Project Team and the public. A quarterly newsletter, designed and produced by a local minority business, was distributed to local library locations and via email to interested citizens, as well as being posted on the City's website.

When a property in either South Waterfront or Downtown North was identified for assessment, it was entered into the ACRES database which was updated at project milestones. At the time of grant closeout, all relevant information pertaining to every property assessed was up-to-date. As further work is performed at the assessed properties, the ACRES database will be updated to reflect the progress.

In conclusion -- As this former McClung property and other brownfields properties are returned to productive use in the community, job opportunities will become available, income levels will rise, property values will increase, and the environmental health and dignity of the surrounding neighborhoods will be restored. Redevelopment of Knoxville's downtown has been a big success so far – the community is on board, the developers are on board, and residents are actively involved in the planning of their neighborhoods. This highly visible site is a prime piece of property. It's so sad that fire destroyed such stately historic buildings – now it needs to be cleaned up and take pride of place in the neighborhood again.



OMB Number: 4040-0004 Expiration Date: 8/31/2016

Application for	Federal Assista	nce SF	-424						
* 1. Type of Submiss Preapplication Application Changed/Corre		Ne □ Co		* If Revision	on, select appropria	ate letter(s):			
* 3. Date Received: 12/16/2015		4. Applio	cant Identifier:						
5a. Federal Entity Ide	entifier:			5b. Fed	deral Award Identii	fier:			
State Use Only:									
6. Date Received by	State:		7. State Application	Identifier:					7
8. APPLICANT INFO	ORMATION:								
* a. Legal Name:	ity of Knoxvil	le							
* b. Employer/Taxpay	yer Identification Nun	nber (EIN	/TIN):		anizational DUNS	S:			
d. Address:									
* Street1: Street2:	400 Main Stree	et							
* City: County/Parish:	Knoxville								
* State: Province:				Т	N: Tennessee			 	
* Country:				USA	: UNITED STAT	TES			
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	lace	1							
Title: Deputy Dir	ector, Office	of Red	evelopment				1		
Organizational Affiliat	ion:								
* Telephone Number:	865-215-2644				Fax Number:	865-215	-3035		
*Email: awallace	@knoxvilletn.g	ov							

Application for Federal Assistance SF-424
* 9. Type of Applicant 1: Select Applicant Type:
C: City or Township Government
Type of Applicant 2: Select Applicant Type:
Type of Applicant 3: Select Applicant Type:
* Other (specify):
* 10. Name of Federal Agency:
Environmental Protection Agency
11. Catalog of Federal Domestic Assistance Number:
66.818
CFDA Title:
Brownfields Assessment and Cleanup Cooperative Agreements
* 12. Funding Opportunity Number:
EPA-OSWER-OBLR-15-06
* Title:
FY16 Guidelines for Brownfields Cleanup Grants
13. Competition Identification Number:
Title:
14. Areas Affected by Project (Cities, Counties, States, etc.):
Add Attachment Delete Attachment View Attachment
* 15. Descriptive Title of Applicant's Project:
The City of Knoxville is applying for a cleanup grant at the Former Sanitary Laundry and Dry Cleaning Facility in Knoxville, Tennessee.
Attach supporting documents as specified in agency instructions.
Add Attachments Delete Attachments View Attachments

Application for	or Federal Assistance SF-424	
16. Congressional	nal Districts Of:	And the second s
* a. Applicant	TN 2nd *b. Program/Project TN 2nd	i
Attach an additional	nal list of Program/Project Congressional Districts if needed.	
	Add Attachment Delete Attachment View	v Attachment
17. Proposed Proj	roject:	
* a. Start Date: 10	10/01/2016 * b. End Date: 09/30,	/2019
18. Estimated Fun	unding (\$):	
* a. Federal	200,000.00	
* b. Applicant	40,000.00	
* c. State	0.00	
* d. Local	0.00	
* e. Other	0.00	
* f. Program Income	me 0.00	
* g. TOTAL	240,000.00	
* 19. Is Application	ion Subject to Review By State Under Executive Order 12372 Process?	
a. This applica	cation was made available to the State under the Executive Order 12372 Process for review on	
The state of the s	is subject to E.O. 12372 but has not been selected by the State for review.	
C. Program is r	s not covered by E.O. 12372.	
* 20. Is the Applica	icant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)	
100-100 BEADER BEADER	No No	
If "Yes", provide ex	explanation and attach	
	Add Attachment Delete Attachment View	Attachment
21. *By signing thi	this application, I certify (1) to the statements contained in the list of certifications** and (2) the	nat the statements
herein are true, co	complete and accurate to the best of my knowledge. I also provide the required assurance resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent stateme	es** and agree to
	riminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)	its of claims may
☐ ** I AGREE		
** The list of certific specific instructions.	difications and assurances, or an internet site where you may obtain this list, is contained in the annotations.	incement or agency
Authorized Repres	resentative:	
Prefix: Ms.	s. *First Name: Madeline	
Middle Name:		
* Last Name: Rog	ogero	
Suffix:		
* Title: Mayor	or, City of Knoxville	
_	ber: 865-215-2040 Fax Number: 865-215-2085	
	knoxvilletn.gov	
	horized Representative: Annemarie Wallace * Date Signed: 12/16/2015	

CITY OF KNOXVILLE

MADELINE ROGERO, MAYOR



William Lyons
Deputy to the Mayor
Chief Policy Officer

R04-16-C-013

December 16, 2015

Ms. Barbara Alfano Region 4 Brownfields Coordinator U.S. Environmental Protection Agency Sam Nunn Atlanta Federal Center 61 Forsyth Street Atlanta GA 30303-8960

Dear Ms. Alfano:

On behalf of the City of Knoxville, Tennessee, I respectfully submit this application to the Environmental Protection Agency (EPA) for \$200,000 in grant funding to assist in the proposed clean-up of the former Sanitary Laundry and Dry Cleaning facility in the City's Downtown North Redevelopment District. This is one of two Brownfield sites that the City is targeting for cleanup in this funding cycle. The other is the former McClung Warehouses property for which we have prepared a separate grant proposal.

Over the past several years, Knoxville has been active in dealing with the issues associated with economic decline in the neighborhoods both north and south of the downtown. The City recently completed environmental assessments, utilizing EPA Brownfields Assessment funding, of multiple properties in both its South Waterfront and Downtown North Redevelopment Areas, and is seeing various redevelopment projects occurring in both sectors. One of the properties recently assessed in Downtown North is the former Sanitary Laundry and Dry cleaning facility on which Phase I and Phase II Environmental Site Assessments were performed. The property has attracted the attention of a local developer but the current condition of the property presents a significant constraint to its redevelopment. The City acquired the property and intends to perform some clean-up activities on the site with the intent of making it more appealing to private investors.

If our application is successful, we will use the funds to remove impacted materials from the site, and for the design and implementation of a vapor mitigation system. Grant funding has enabled us to understand the environmental conditions on the site and what will be required to remediate it to the point of marketability. This application for funding is the next logical step towards that goal, and with a combination of funds from the EPA and the City of Knoxville, we believe we can accomplish that goal.

Sincerely,

William Lyons, Senior Director

Department of Policy and Communications

2		

Appendix 3 Cleanup Other Factors Checklist

Name of Applicant:	City of Knoxville	
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Please identify (with an X) which, if any of the below items apply to your community or your project as described in your proposal. To be considered for an Other Factor, you must include the page number where each applicable factor is discussed in your proposal. EPA will verify these disclosures prior to selection and may consider this information during the selection process. If this information is not clearly discussed in your narrative proposal or in any other attachments, it will not be considered during the selection process.

Other Factor	Page #
None of the Other Factors are applicable.	X
Community population is 10,000 or less.	
Applicant is, or will assist, a federally recognized Indian tribe or United States	
territory.	
Targeted brownfield sites are impacted by mine-scarred land.	
Applicant demonstrates firm leveraging commitments for facilitating brownfield	
project completion by identifying amounts and contributors of funding in the proposal and have included documentation.	
Recent (2008 or later) significant economic disruption has occurred within	
community, resulting in a significant percentage loss of community jobs and tax	
base.	
Applicant is one of the 24 recipients, or a core partner/implementation strategy	
party, of a "manufacturing community" designation provided by the Economic	
Development Administration (EDA) under the Investing in Manufacturing	
Communities Partnership (IMCP). To be considered, applicants must clearly	
demonstrate in the proposal the nexus between their IMCP designation and	
the Brownfield activities. Additionally, applicants must attach	
documentation which demonstrate either designation as one of the 24	
recipients, or relevant pages from a recipient's IMCP proposal which	
lists/describes the core partners and implementation strategy parties.	
Applicant is a recipient or a core partner of HUD-DOT-EPA Partnership for	
Sustainable Communities (PSC) grant funding or technical assistance that is	
directly tied to the proposed Brownfields project, and can demonstrate that	
funding from a PSC grant/technical assistance has or will benefit the project	
area. Examples of PSC grant or technical assistance include a HUD Regional	
Planning or Challenge grant, DOT Transportation Investment Generating	
Economic Recovery (TIGER), or EPA Smart Growth Implementation or	
Building Blocks Assistance, etc. To be considered, applicant must attach	
documentation.	
Applicant is a recipient of an EPA Brownfields Area-Wide Planning grant.	

City of Knoxville Brownfields Grant Proposal for Cleanup Funds Former Sanitary Laundry Property Narrative Proposal - Ranking Criteria

1. Community Need

a. Targeted Community and Brownfields (8 Points)

Targeted Community Description

The City of Knoxville lies within the heart of Appalachia and is located in the eastern portion of Tennessee, in the valley between the Cumberland Mountains and the Great Smoky Mountains. Knoxville's industrial growth in the late 1800's sprang from its railroad connections – it was the region's busiest depot for freight and passenger traffic. North Knoxville, our target community and the area in which our target property is located, started to develop an industrial base around the railroad with textile mills, foundries, manufacturing and railroad maintenance facilities that provided employment to thousands. Tree-lined neighborhoods sprung up around this industrial area with a healthy mix of residents - professionals and laborers, families and transients, black and white. Business was flourishing, the social network was strong, hard work was rewarded, and life was good. The economic decline of North Knoxville started with the Great Depression. Many of the once thriving industries became idle and abandoned. Jobs became scarce, commercial businesses had a hard time surviving, houses fell into disrepair, and the level of poverty increased.

Demographic Information

Today, the North Knoxville neighborhood, known as Downtown North, is predominantly white, the minority population is less than the national level, and unemployment rates are reflective of state and national averages, but incomes are much lower and the poverty level is much higher, as is the disability rate, all of which is indicated in the following comparative data table. We used American Community Survey (ACS), 2008-2012, five year estimates, because those data drill to the census tract level and allow us to present as accurate a picture as possible.

Relevant Demographic Data					
	Target Area	Tennessee	U.S.		
Population	3,273	6,353,226	309,138,711		
Minority	16.2%	21.2%	25.8%		
Unemployment *	5.3%	5.7%	5.1%		
Median Household Income	\$25,435	\$44,140	\$53,046		
Individuals Below Poverty Level	32.5%	17.3%	14.9%		
Persons with a disability	21%	15%	12%		
Education level – high school grad and beyond	80.4%	83.9%	85.7%		

Source: 2008-2012 American Community Survey (ACS) 5-year estimates

Description of Brownfields

Our subject property occupies a one third-acre site in Downtown North, and includes a 15,000 sq. ft. vacant building formerly occupied by Sanitary Laundry and Dry Cleaning which operated on the property from 1926 until 1993. The facility employed anywhere from 100-200 people at various times and was one of the larger employers in the neighborhood. One dry cleaning solvent and two gasoline underground storage tanks (UST) were located on the property. The gasoline USTs were removed in 1993. The dry cleaning UST was emptied in 1994 but, based on the Phase I Environmental Site Assessment (ESA) performed in 2013, this UST remains on the property. Analyses, conducted during a Phase II ESA in 2014, identified soil

^{*}Unemployment rate per Bureau of Labor Statistics – September, 2015 (Knoxville-Tennessee-U.S.)

and groundwater contaminated with dry cleaning compounds, solvents, and petroleum products. Asbestos-containing materials and lead based paint are present in multiple areas of the building. The property was placed on the Tennessee Department of Environment and Conservation's (TDEC's) State Superfund List in 1994. The subject property is located close to other commercial establishments, residential housing and social services facilities, including homeless shelters and ministries, all within our target community.

An inventory of brownfield sites in our Downtown North target area, which spans approximately 541 acres, shows an estimated 80 brownfield properties (including our subject property), 51 of which are suspected of being hazardous substance sites, 19 petroleum sites, and 10 hazardous/petroleum sites. These sites span approx. 25% of the target community, and range in size from small commercial parcels to 20-acre sites. The area is heavily populated with former metals processing, textile mills, and auto repair shops, many of which have been there for decades and occupy facilities that are run down and in need of renovation.

Environmental dangers caused by site contaminants and their migration, groundwater impacts, surface runoff, or waste material dumped on sites, adversely impact the health, welfare and environment of people exposed to them through contact with soil, air and water. The inventory suggests that contaminants such as petroleum hydrocarbons including gasoline and diesel fuel, polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons (PAHs), lead-based paint, asbestos-containing materials, industrial chemicals such as chlorinated solvents, creosote, and various priority pollutant metals, are likely present in our target area. The abandoned, vandalized, and derelict structures pose a safety risk, not only because of their insecure condition and potential for site contaminants, but their unrestricted access attracts vagrants with substance abuse problems, and makes them an attractive nuisance to curious children.

Cumulative Environmental Issues

The industrial base that developed around the railroad industry hub in North Knoxville is largely long gone leaving a legacy of abandoned, derelict and polluted sites. However, some functioning heavy industrial facilities remain including a steel mill that processes scrap metal into steel, an asphalt manufacturing facility and a chemical processing plant. While these industries offer employment opportunities to area residents, the buildings they occupy are quite old and have been in the community for decades. The Sanitary Laundry Phase I ESA identified twelve historical auto stations and four historical cleaners within a quarter-mile of the site. Thirteen facilities within the ASTM minimum search distances were on TDEC's regulatory database, most recorded as containing Leaking USTs. Many vacant properties in our target area have become dumping grounds for all manner of trash, from discarded beer bottles to old and unwanted household furniture. Until this year Knoxville was designated a non-attainment area for ozone standards predominantly caused by vehicle pollution due to traffic volume on the network of interstates that intersect the region, (but is still non-attainment for particulates). Downtown North is bordered on one side by I-275 which carries close to 60,000 vehicles daily, and by I-40 on another with 100,000+ vehicles daily. Our subject property is on Broadway, a four-lane highway in the heart of our redevelopment area, which carries almost 9,000 vehicles per day. Vehicle pollution poses a real health threat in the neighborhood. In addition, several streams in Knoxville are listed as impaired by TDEC, including Second Creek which runs through the target area. Second Creek is on TDEC's 303d list and is posted for a water contact advisory. Surface runoff from unsecured former industrial properties have contributed to the contamination in Second Creek.

b. Impacts on Targeted Community (5 points)

Although the City of Knoxville is located in a region of particular scenic beauty, it has poor air quality and serious health concerns including a high obesity rate, and a ranking of #7 in the country on the list of the most challenging places to live with asthma (Asthma and Allergy Foundation of America - 2015 report). The

EPA released health risk data on the national-scale air toxics assessment (NATA) in 2005, which scales down to the census tract level. Air toxics are pollutants known or suspected of causing cancer or other serious health problems such as birth defects. The tracts that make up our target area are shown to have an elevated risk for cancer, neurological risks and respiratory disease. The EPA, Environmental Justice, EJView shows that women of child-bearing age in these same census tracts are at an elevated risk for low birth weight infants (who go on to have a lifetime of increased risk of health problems), and for increased infant mortality. Since this is a low income neighborhood with older houses, there are problems with lead-based paint, leading to an increased risk for neurological damage to resident children. ACS (2008-2012, 5-year estimates), shows 36.1% of housing in our target area is more than 65 years old compared to the rest of Tennessee at 6.7% and the national average of 13.7%. Based on a combination of age of housing and data on patients' blood lead levels over the past several years, the Knox Co. Health Dept. determined that the North Knoxville neighborhoods have the highest risk of elevated blood lead levels in Knoxville.

East Tennessee is located in the heart of Appalachia which has historically experienced a poverty rate higher than the national average and an education level lower than the national average. The demographic table shows our target neighborhood has an income level far below the state and national average. The target area has a disproportionate number of families receiving public assistance in food stamps/SNAP benefits – 23% vs. the national average of 11.4%, and while poverty and lower education levels do not create adverse health conditions, residents have limited access to preventive and pre-natal health care and medical services, in part due to limited transportation options to access these facilities. Downtown North is where most social service organizations are located and where the homeless congregate, which presents a safety concern for them and for others if they shelter in abandoned buildings that litter the neighborhood. There is far more likelihood of illegal activity, injurious trash and vandalism in these locations.

The property that will be cleaned up under this grant was first developed in the early 1900's and operated as a laundry and dry cleaning facility from 1926-1993. Its impacts on the surrounding community are many, including dry cleaning compounds and solvents detected in groundwater at concentrations that exceed USEPA primary drinking water maximum contaminant levels; evidence of one dry cleaning solvent UST on site; miscellaneous debris and containers of oil, paint and solvents that remain in the abandoned building; concentrations of volatile organic compounds (VOCs) that exceed residential and industrial regional screening levels; plus evidence of previous habitation by homeless individuals. Numerous old 55-gallon drums of oil and dry cleaning fluid were discovered by the Knoxville Fire Department in and around two of the buildings located on the site, while responding to small fires set by homeless individuals using the subject building for shelter. Several of the drums showed signs of leakage and the state contracted to have the drums removed. Since then, no further remedial activities have occurred on the subject property.

c. Financial Need (7 points)

i. Economic Conditions (3 points)

Knoxville has invested heavily in community improvement projects and, like most cities of its size, there are multiple public improvement projects occurring at any given time. Just within the Office of Redevelopment, twelve neighborhood improvement projects are ongoing, and for these projects alone, the City has committed approximately \$45 million in funding. While the City recognizes the importance of providing funding for improvement projects, and has done so to the best of its fiscal ability, there is a limit on available funds as regular city services must be maintained despite fiscal constraints. Within the past few years, the Knoxville News Sentinel reports company closures in Knoxville have included ARC Automotive (51 jobs lost), Image Point (270 jobs lost), Brunswick Boats (765 jobs lost), RockTenn (88 jobs lost), PBR Automotive (225 jobs lost), Jewelry TV (150 jobs lost), plus many more smaller company layoffs. In

addition, two companies plan to close before the end of this year – Rocore (50 jobs) and Community Health Partners (148 jobs). Not only do these closures reduce tax income for the City, they adversely impact local retailers such as office supply stores, copier services, janitorial services etc. whose goods and services are no longer required at the closed businesses. As is typical in once-thriving, inner city areas, job losses from the closure of local facilities in Downtown North resulted in less money to spend on home maintenance, resulting in depressed property values and lower property tax revenue for the City. While the Knoxville economy is improving since the market crash in 2007, lending is still not up to pre-2007 levels which makes private developers cautious to invest. The City of Knoxville cannot afford to cover the complete cost of cleaning up its brownfields sites to satisfy developers. However, the City is willing to invest significant funding into brownfields cleanup as a partner in redevelopment, and therefore is looking to the EPA and other resources, including private investors, to partner in this cleanup and redevelopment initiative.

ii. Economic Effects of Brownfields (4 points)

The economic impact of Brownfields is evidenced by the sheer number of Brownfield properties - 80 identified in the recent inventory covering 25% of the target area - and lack of a corresponding thriving commercial business community, as well as the lack of upkeep to many of the homes in the surrounding neighborhoods. Downtown North was heavily populated with industrial and commercial properties. Closure of these productive facilities meant a large decrease in tax revenue, both from the standpoint of property taxes (if the property is abandoned with no evident owner) and sales tax revenue. Very few municipalities can sustain comprehensive services with less income. Downtown North is an older Knoxville community, and while there are several historic neighborhoods where homes have been bought by younger families who are attempting to restore them, the preponderance of homes around the more industrial parts suffer from a lack of maintenance. The fundamental reason for this is the lower incomes of most of the residents. As shown in our comparative data table, unemployment rates are reflective of the U.S. average (5.3% vs. 5.1%), but the median household income in our target area is less than half that of the U.S. (\$25,435 vs. \$53,046). The closure of local industries and their relocation to the City's urban fringes or to neighboring counties has resulted in job losses in the neighborhoods, and created an additional problem related to transportation. Knoxville has limited transportation options, which means that residents of Downtown North neighborhoods in many cases, have to rely on automobiles to get to work, which increases their burden of costs and contributes to air pollution. They face a similar situation for shopping and activities associated with normal daily activity. Too often the additional economic burden of transportation costs to reach the employment and commercial centers are more than a household income can tolerate. Additional income and poverty statistics from the ACS, Population and Housing Narrative Profile 2009-2013 indicate that 21% of Knoxville households had an income below \$15,000 per year, and 33% of related children under 18 were below the poverty level, plus 16% of all families and 43% of families with a female householder and no husband present had incomes below the poverty level. As mentioned this is a neighborhood where the homeless congregate and often use the abandoned buildings for illegal activities. The Knoxville police are called frequently for assistance for negative activities associated with homeless issues/predators of the homeless population (i.e. drug dealers, etc.) and they have increased patrolling for prostitution stings in the neighborhood, all of which increases policing costs and adversely affects the local economy.

2. Project Description and Feasibility of Success

a. Project Description (15 points)

i. Existing Conditions (5 points)

The former Sanitary Laundry and Dry Cleaning facility occupied two contiguous parcels containing approx. 0.70 acres located at 625 North Broadway and 750-760 Stone Street. The Stone Street parcels have been purchased by others and are undergoing redevelopment. This cleanup grant application addresses the 1/3-

acre portion of the property on North Broadway that is owned by the City of Knoxville which acquired the property through tax foreclosure. The target property is situated in the downtown North Knoxville area. The facility operated as a dry cleaner for 67 years. A 15,000 sq. ft. building that housed the laundry and dry cleaning operation remains on the property and is vacant. The building has a concrete floor, masonry walls and a basement. Metal beams and trusses support a central raised roof with clerestory windows. A portion of the building was likely used as offices. Staining of the concrete floor can be seen throughout the building. There is a loading dock on one side of the building, and a large boiler on another. There is an elevated concrete trough but its past use is unknown. Steam piping used in the dry cleaning process is throughout the building. Two gasoline USTs and one heating oil AST, plus a chlorinated solvent UST were located on the property. The gasoline USTs were removed in 1993. The dry cleaning UST was emptied in 1994 but remains onsite. Numerous 55-gallon drums of oil and dry-cleaning fluids were removed from the property in 1999. A Phase II ESA conducted in 2014 consisted of the collection and laboratory analysis of 34 passive soil vapor modules, subsurface soil samples, groundwater samples, soil gas samples and ambient air from the site. Groundwater samples were collected from two existing monitoring wells and from six piezometers installed during the Phase II ESA sampling. These investigations identified soil and groundwater contaminated with dry cleaning compounds, solvents and petroleum products. An asbestos and lead-based paint survey was conducted in 2014 and both contaminants were found in multiple rooms in the building.

Since the City of Knoxville acquired the property, its reuse has been the subject of much discussion, both in public forums and within the City's Office of Redevelopment. The building is potentially eligible for listing on the National Register of Historic Places and therefore, the City would prefer to preserve the basic building structure. Probable reuse scenarios are commercial, retail or residential. The City issued a Request for Proposals in the hope that a local developer would generate a vision and reuse plan for the former laundry facility but interest was limited because of the uncertainty of the structural integrity of the building and its contamination potential. So the City is expending funds to perform a structural evaluation of the building and to replace the existing roof which is in critical condition. If the City of Knoxville is successful in its grant application, it will use the \$200,000 in cleanup funds to remove contaminated materials from the site, and install a vapor barrier to prevent vapor intrusion through the existing concrete slab floor. By cleaning up the former Sanitary Laundry site, along with a structural report and a stable roof, the property, which is pivotal in Downtown North's redevelopment corridor, will be a far more palatable prospect for private investment, much of which has already occurred in the neighborhood.

Downtown North is the gateway to downtown Knoxville and includes the I-275 Corridor which has evolved over many years into an area that has experienced environmental degradation through the loss of viable industrial and commercial businesses. As a result of several planning studies and public support, the City embarked on a plan to renovate Downtown North into an integrated mixed use area with visual, pedestrian, vehicular and land use connections. Over the past several years, Downtown North has identified itself as a special place with a unique character, and local business owners and residents have embraced the idea that this area can be a thriving local community once again. Local developers have purchased several properties in the Downtown North redevelopment area and have transformed them from vacant or under-utilized structures into new retail establishments including craft brew and eateries, a bakery, a food co-op, plus an eclectic mix of retail shops. Our subject property is in the middle of this mix and its redevelopment will greatly enhance the ongoing revitalization of the neighborhood.

ii. Proposed Cleanup Plan (10 points)

The purpose of cleaning up the former Sanitary Laundry property is to encourage private investment in a property that is centrally located in the Downtown North Redevelopment Area. Cleanup planning includes

two important documents - an Analysis of Brownfields Cleanup Alternatives (ABCA) that outlines alternative methods under consideration, and a Brownfields Voluntary Agreement (BVA). The TDEC Division of Remediation (DOR) has been involved with the subject site for many years. In support of Knoxville's redevelopment efforts, and to ensure that site redevelopment is performed in accordance with applicable regulations, TDEC prepared a BVA which will be made a condition of sale of the property. The BVA lists the conditions under which the site can be developed such that it protects public health and safety, and the environment. These conditions include a DOR-approved Soil Management Plan (SMP) for characterization, handling and disposal of excavated materials as well as future management and maintenance of any covers and caps; the installation of a vapor mitigation system plus its continued care, operation and maintenance; and a Health and Safety Plan to ensure that all remediation activities are performed with strict adherence to the health and safety of the public and the environment. In addition, the BVA requires that any land use restrictions for safe future use of the property will be filed in accordance with state statute. The BVA is included as an Appendix to the ABCA.

The ABCA provides an evaluation of cleanup alternatives for the former Sanitary Laundry site. The City and TDEC DOR assume that the site will be redeveloped for retail, commercial or residential purposes because this has been the pattern of infill redevelopment that is happening in the target area, and fits with the Downtown North vision for an integrated mixed-use area that brings community character back to this historic neighborhood. While there is not yet a specific site redevelopment plan, some general assumptions were made to complete the ABCA. Three alternatives were considered: (1) No action, (2) Redevelopment using existing foundations, and (3) Removal of some or all of the existing foundations, followed by construction of a new structure. The "no action" alternative is not considered viable because the subject property is currently in a state of disrepair and negatively impacts surrounding property values. Moreover, its condition presents a threat to public health and safety and the environment.

The second alternative - redevelopment using existing foundations - would be a viable option if the proposed use for the property would support this approach. Some demolition and removal of debris would be required, but this approach would limit subsurface disturbance to utility trenches or other limited areas where excavation would be needed to support redevelopment design. Soil removed from these areas would be screened for impacts, and based on the findings, handled in accordance with local, state and federal regulations. Any proposed site redevelopment must address the potential for subsurface vapors to migrate to ambient air thru the existing concrete slab, so site design would include a soil vapor mitigation system to protect future building occupants by breaking the exposure pathway for vapor migration. Two potential approaches for the soil vapor system include an impervious barrier, or a sub-slab depressurization system that creates a negative pressure beneath the slab and vents the vapors to the outdoor air. Additional evaluation of the existing structural integrity of the slab, and proposed site reuse, will assist in designing the appropriate vapor mitigation system. In addition to the SMP and vapor mitigation system design, this cleanup alternative would also warrant a land use restriction to document the vapor mitigation system details, establish that groundwater usage from the subject site is prohibited, and document the protocol for monitoring and maintenance of the vapor mitigation system.

The third alternative considered is the removal of some or all of the existing foundations. Depending on the final redevelopment plan and the results of a structural evaluation, demolition followed by new construction is a possibility. Assuming that some impacted soils and/or groundwater could potentially remain beneath the building following the removal of existing foundations, this cleanup alternative would also require a vapor mitigation system, an SMP, and filing of land use restrictions for the site. Should this alternative be selected, excavated foundations and impacted sub-slab materials would be characterized and handled in

accordance with local, state and federal regulations, and in accordance with the SMP. Material classified as special waste would be disposed of in a Subtitle D Landfill and, if encountered, hazardous waste would be taken to a permitted hazardous waste disposal facility, with appropriate documentation for the transportation and disposal. The ABCA, included as an Attachment to this grant proposal, discusses anticipated costs for each of the two action alternatives.

Given the building's historic element, the preferred alternative is redevelopment using existing foundations, however, a final alternative will be selected based on further site evaluation and public input.

b. Task Descriptions and Budget Table (10 points) <u>Task Descriptions</u>

Community Outreach (\$5,300) - This task includes publicity, meetings, and distribution of information to the public as the project progresses. Public/neighborhood meetings will be held at the start and end of the project. We will produce a quarterly update to be included in existing community newsletters updating the cleanup's progress throughout the duration of the project (8 @ \$250/newsletter = \$2,000). Supplies needed for public meetings might include printed handout materials, etc. (2 mtgs. @ \$150 = \$300) and the contractor would be required to prepare visual presentations of progress reports and attend all meetings to discuss project procedures and answer technical questions (2 staff/2mtgs. report preparation and presentation @ \$1,500/mtq. = \$3,000)

<u>Program Development & Management (\$4,000)</u> – This task includes documenting guiding principles and procedures, establishing priorities for site remedial actions, and EPA-required performance reporting - e.g. quarterly reports, MBE-WBE reports, final cleanup and closeout reports and ACRES database reporting (\$2,000). Travel costs in this budget task would be used for attendance at regional Brownfields grantee workshops and the National Brownfields conference. (2 staff @ \$1,000/conference = \$2,000)

Remedial Planning and Design (\$24,000) – This task includes the outputs of finalizing the ABCA (\$1,000), coordinating with TDEC to finalize the Land Use Restrictions, Soil Management and Health & Safety Plans (\$3,000), inventory of the current building contents to determine if drums, containers or other materials need to be properly characterized and disposed of (\$6,000), and vapor mitigation system design (\$14,000)

Cleanup Activities (\$206,700) – This task includes anticipated contractor costs for removal and disposal of contaminated materials, lead-based paint and asbestos, and installation of engineering controls such as caps and barriers. For preliminary budgeting purposes, application of a commercially available impervious barrier costs approximately \$7/sq. ft. (excluding engineering design and monitoring) so for the approximately 15,000 sq. ft. subject building, the cost would be approximately \$105,000. While we cannot provide a cost for handling and disposal of excavated material until we know the extent of cleanup required for the future selected cleanup alternative, we can estimate fees for excavation, transportation and disposal of special waste to a Subtitle D Landfill at approximately \$75/ton, and material classified as hazardous waste to a permitted facility at approximately \$350/ton (estimate \$26,700). Also, a preliminary estimated budget in excess of \$100,000 for the lead-based paint and asbestos removal has been obtained. The City has committed to using their matching funds for this task to limit the expenditure of EPA funds for asbestos removal (federal grant funds \$25,000 – city matching funds \$40,000) but recognizes that additional City cleanup funds may be needed to complete the asbestos removal. This task also includes a final cleanup/project report and regulatory coordination regarding technical aspects of the project with TDEC and EPA throughout the cleanup effort (Final Report and Regulatory Coordination \$10,000).

Budget Table

	Budg	et for former Sanitary La	undry Cleanup Projec	t	
Budget Categories		Pro	oject Tasks		
	Community Outreach	Program Development & Management	Remedial Planning and Design	Cleanup Activities	Total
Personnel					
Travel		\$2,000			\$2,000
Equipment					
Supplies	\$300				\$300
Contractual	\$5,000	\$2,000	\$24,000	\$206,700	\$237,700
Other					
Total Federal Funding	\$5,300	\$4,000	\$24,000	\$166,700	\$200,000
Cost Share				\$40,000	\$40,000
Total Budget	\$5,300	\$4,000	\$24,000	\$206,700	\$240,000

c. Ability to Leverage (5 points)

The Office of Redevelopment oversees projects that contribute to the enhancement of community livability. and has worked diligently to leverage local dollars for a variety of state and federal funding sources as well as private investment. This effort has resulted in more than \$200 million in private investment from developers and business owners, and tens of millions of dollars in leveraged funding from federal and state sources. The City was successful in applying for a \$400,000 EPA Brownfields Assessment Grant to assess Downtown North properties and this funding, along with local funds being used for public infrastructure improvements, has led to investment from private developers into multiple property improvements in our target area. Of the six Phase II ESAs funded by the grant which closed out in 2014, one property (Historic Knoxville High School) is being redeveloped into 100 senior living apartments using public/private funding. one has been purchased by a local businessman for future mixed-use development, and four are being marketed for redevelopment, including our subject property. Private sector interest is strong and the City wants to capitalize on that interest and draw on available funding resources to spur redevelopment. Sanitary Laundry and Dry Cleaning will require some level of remediation before it can be redeveloped. The City issued a Request for Proposals to redevelop the property but the proposal submitted required a level of funding incentives that the City could not manage. One of the impediments to the building's redevelopment is the condition of the structure's roof which needs to be replaced at an estimated cost of \$800,000. If environmental cleanup of the site goes forward, we are confident that developer interest will be renewed. The City is prepared to invest Capital Improvement Program funds, and is currently working on leveraging additional funds, to replace the roof. With local developers having already purchased adjacent properties, the location of the Sanitary Laundry site, with a new roof and environmental cleanup, makes it prime for private investment and redevelopment.

Examples of a few recent Office of Redevelopment community improvement projects in the Downtown North area that have leveraged public and private funding include:

- North Central Street Transportation Improvement (Central St. intersects with Broadway) \$2.5M project utilizing Department of Transportation, Surface Transportation Funds (STP) (80/20 match) the City has committed \$825,000 for sidewalk repair, landscaping, and street resurfacing; and Knoxville Utilities Board (KUB) will fund \$750,000 for water line replacement; status ongoing
- I-275 Business Park Access Improvements (I-275 borders our Downtown North redevelopment area) -\$5.5M High Priority Project utilizing DOT funding (80/20 match) - TDOT \$4.4M; City \$1.1M. This corridor study was initiated in 2007/2008; all plans, environmental reviews and final designs were completed by 2014; status - in Right of Way acquisition
- Cumberland Ave Corridor (adjacent to our Downtown North redevelopment area) \$17.5M streetscape +
 \$3.5M for design and right of way STP funds (80/20 match); KUB will provide \$5M to upgrade gas, water and sewer lines; status ongoing
- Façade Improvement Program Eligible property owners in the redevelopment districts can receive up to \$50,000 for façade improvements to their buildings with the property owner providing a 20% match; status - ongoing (138 buildings since the program began, 30 of which are in Downtown North)

3. Community Engagement and Partnerships

a. Plan for Involving Targeted Community and Other Stakeholders; and Communicating Project Progress (5 points)

The City of Knoxville makes every effort to engage local citizens in plans for projects in their neighborhoods in order to make full use of citizens' ideas and opinions in considering investment of public funds. Residents and business owners in Downtown North understand that environmental issues related to Brownfield sites. can have a detrimental effect on not only their individual health, but also on the economic health of their neighborhoods. They expressed their concerns in meetings and the City responded. The City took on the challenge of assessing the area's brownfield properties and, with the aid of EPA Brownfields grant funding. performed multiple ESAs. Throughout the assessment project, the City held quarterly public meetings to inform residents of the project's progress. Meetings were publicized on the City's website and held in a location central to the project area. The City engaged a minority firm to produce a quarterly newsletter providing details about the assessment activities which was published on the City's website, distributed to local libraries, and sent via email to interested citizens. If the City's grant application for cleanup funding is successful, the City will similarly involve the public, and in particular, the target neighborhood's residents, in the decision-making for the reuse of the site and its appropriate cleanup. Naturally, the area's residents will have concerns related to cleanup activities, particularly as they might affect sensitive populations. The City and its contractor will explain the measures that will be taken to provide health and safety protections to the neighborhood during cleanup and construction activities. If impacted materials or soil vapors are encountered during remedial activities, appropriate monitoring would be performed to document site conditions, and precautions taken to reduce exposure potential. The policy of the City is to ensure meaningful communication with persons that experience Limited English Proficiency. The primary language in the area is English, and the City has not been requested to communicate in another language. However, should that need arise there are available resources at the Center for International Education at the University of Tennessee, Knoxville, and also the Hispanic Chamber of Commerce, located in Knoxville.

b. Partnerships with Government Agencies (5 points)

Throughout the Brownfields Assessment projects that the City of Knoxville has successfully completed, the Tennessee Department of Environment and Conservation has been a strategic partner in lockstep with the City to aid in determining the extent of contamination of selected properties targeted for assessment. Funding for both hazardous and petroleum contamination sites required working closely with several TDEC personnel in the relevant local field offices, as well as the Brownfields Program Manager in TDEC's

Nashville headquarters, to make sure that all appropriate guidelines and rules were being followed. TDEC personnel attended public meetings and committee meetings and have been included in all correspondence related to the assessment projects. The former Sanitary Laundry site was placed on the State Superfund List in 1994. TDEC initiated emergency removal actions in 1994 to address underground storage tanks and two barrels of dry-cleaning fluid, and again in 1999 to remove numerous 55-gallon drums of dry cleaning fluids and oil. TDEC has worked with the City in preparing Brownfields Voluntary Agreements for properties identified and targeted for redevelopment. The former Sanitary Laundry facility is one such property and TDEC and the City have agreed that the BVA is to be made a condition of sale of the property. The terms of the BVA basically dictate that any proposed redevelopment activity, i.e. cleanup tasks and future site use, must adhere to strict standards set by the regulatory agency that protect public safety, health and the environment.

The Knox Co. Health Dept. is physically located in the target area and provides health services to neighborhood residents. The Health Dept. hosted several public meetings to engage the community in the redevelopment planning for the target area and will be a public site for project progress bulletins.

c. Partnerships with Community Organizations (5 points)

While there are several community-based organizations that support the project, there are four that have already played a noteworthy role, and have committed to continuing their active involvement.

Knoxville's Community Development Corporation (KCDC) is the housing and redevelopment agency for the City. For nearly 70 years, KCDC has enhanced the quality of life for the citizens of Knoxville by providing safe, decent and affordable housing, advancing redevelopment initiatives, fostering self-sufficiency, and improving neighborhoods and communities. KCDC administers more than \$6 million annually in redevelopment and community and neighborhood revitalization, and is responsible for numerous neighborhood improvement projects including developing two new grocery stores, medical office complexes, and more than 100 new housing units. Working in conjunction with the Metropolitan Planning Commission, KCDC produced the Downtown North/l-275 Corridor Redevelopment and Urban Renewal Plan to address critical issues affecting Downtown North including: economic development, particularly on older, often vacant, industrial properties; conservation of historic resources, especially historic properties in the Downtown North neighborhoods; improving multi-modal transportation including a new access road along I-275, plus sidewalks and bicycle facilities; new land use opportunities on underutilized and vacant properties offering mixed-use development; and enhancement of environmental and recreational systems including the Second Creek greenway that runs through the area. KCDC will continue its role as redevelopment agency to support the implementation of the Downtown North Redevelopment Plan.

The Development Corporation of Knox County (TDC) is a non-profit organization committed to fostering the long-term, quality growth of the region's business environment. As the property owner and manager of six business parks located throughout Knox County, TDC is focused on maintaining a sufficient inventory and diversity of properties to meet the needs of new and expanding businesses. In 2004, Knox Co./TDC applied for, and received, an EPA Brownfields Assessment Grant to assess a 19.4-acre derelict property in Downtown North - the former Brookside Knitting Mill, which had become an attraction for indigent people, and presented a safety hazard in the community. EPA Brownfields funds were used to assess Brookside Mills, local government funds were used to clean up the property, and a Brownfields Voluntary Agreement with TDEC was enacted in 2007. The site was purchased and redeveloped by a local businessman and now houses the corporate offices of Holston Gases. TDC understands the role of Brownfields in industrial development and because the Downtown North area is in a major industrial corridor, TDC actively

promotes job creation opportunities for the area and partners with the City and Chamber of Commerce to market industrial properties. TDC's Executive Vice President served on the Knoxville South Waterfront and Downtown North Brownfields Committees and helped guide the City in the prioritization of brownfield sites for redevelopment. It is anticipated that he will perform a similar role for the Sanitary Laundry cleanup.

East Tennessee Community Design Center (ETCDC) is a non-profit organization that facilitates positive change in economically distressed communities through the pro bono contributions of area architects, landscape architects, planners, and other professionals. This network of community volunteers donates over 2,000 volunteer hours annually which leverage five times their value in improvements and services. ETCDC provides land use planning, landscape design, blight removal, visual enhancement programs, and neighborhood stabilization projects including parks, community centers, blighted property identification. housing rehab planning, adaptive reuse of historic properties, and community input visioning. ETCDC partnered with the City in the creation of its façade improvement program to provide incentives to business owners to renovate their building facades, and on a study for the adaptive reuse of abandoned Oakwood Elementary School which had fallen into disrepair. ETCDC led a public involvement process to gather input from the neighborhood regarding the old school's future use. The school has since been redeveloped into an assisted living facility. Currently, ETCDC is partnering with the City and the Broadway Corridor Task Force to develop an Enhancement Plan to consider ways to improve the corridor for businesses and adjacent neighborhoods in Downtown North. ETCDC hosted a design charrette in the neighborhood in November 2015 to gather input from all interested local businesses, residents and organizations, and will continue to work with the City as it moves forward with cleanup and redevelopment of blighted properties.

St. John's Lutheran Church is a historic Lutheran church located on Broadway. Individuals from the Church's Outreach Team volunteer their time to support several local programs including: Habitat for Humanity — church members provide labor and funding to build a house every other year. Family Promise of Knoxville and Knox Area Rescue Ministries — St. John's sends a team of volunteers to cook and serve meals to the poor and homeless families. The Senior Nutrition "Mobile Meals" Program — St. John's volunteers serve two of the routes within our target neighborhood and also check on the meal recipients, reporting any health or safety concerns to the Knoxville-Knox County Community Action Committee Office on Aging for follow-up. KIDS HOPE USA — trained volunteers develop mentor relationships with at-risk public school children spending one hour a week with carefully matched students at an elementary school in the target neighborhood. St. John's Lutheran Church provided meeting space at no charge to the City of Knoxville for quarterly public meetings held throughout the duration of the Downtown North Brownfields Assessment and will make its facility similarly available throughout the site cleanup project.

4. Project Benefits

a. Health and/or Welfare and Environmental Benefits (10 points)

Health and/or Welfare Benefits (5 points)

Pollutants from industrial waste and toxic chemicals are considered harmful to humans who are exposed to them through contact with soil, air and water. Sensitive populations such as children, pregnant women and the elderly are at particular risk as their immune systems may be less resistant. The property to be cleaned up under this grant was first developed in the early 1900's and operated as a laundry and dry cleaning facility for 67 years. The Phase II ESA identified soil and groundwater contaminated with dry cleaning compounds, solvents and petroleum products. Miscellaneous debris and small containers of oil, paint and solvents remain in the abandoned building. Concentrations of VOCs exceed residential and industrial regional screening levels as determined by ambient air sampling. Asbestos and lead-based paint are present in multiple rooms. These contaminants plus the evidence of previous habitation by homeless

individuals all combine to present a threat to the health and welfare of the neighborhood. This threat will be eliminated when the property is cleaned up, secured, and redeveloped into an asset for the community. Debris and detritus will be removed from the site, a new roof will replace the current unsafe structure, and the property will be secured to prevent unauthorized trespass. The terms and conditions, along with Land Use Restrictions set by TDEC in the Brownfields Voluntary Agreement, will ensure that future use of the site will not pose a danger to public health, safety, and the environment. Cleanup of the property will renew interest from private developers who have already shown interest in development options, especially since several adjacent properties have been redeveloped into successful commercial enterprises. Site cleanup and redevelopment will offer employment opportunities if the end use is for retail or commercial, and the opportunity for residents to walk to the new facility, encouraging exercise to promote a healthier lifestyle.

ii. Environmental Benefits (5 points)

The vapor barrier proposed in the ABCA will prevent vapor intrusion from migrating into any future structure or adaptive reuse of the current structure, and monitoring and maintenance of the vapor system will continue after its installation. Surface runoff from our property most likely contains pollutants such as soil, chemicals and oil which enters storm drains, and ultimately ends up in rivers and streams and can contaminate drinking water. While surface runoff will still occur, cleaning up the site will reduce the amount of pollutants entering the storm drains. Waste material dumped on the site breaks down over a period of time and can release chemicals into the soil and air. Removing waste material will remove this threat from the environment. Site cleanup will lead to redevelopment and most likely offer employment and dining or shopping opportunities for local neighborhood residents. Potentially, this will allow some of these residents to walk to work instead of having to drive, or walk to the retail establishments which in turn, reduces vehicle emissions that contribute to unhealthy air. All of these benefits contribute to a healthier environment.

b. Environmental Benefits from Infrastructure Reuse/Sustainable Reuse (5 points)

Policies, Planning or Other Tools (2 points)

At the beginning of her administration, Knoxville's Mayor Madeline Rogero outlined four major goals:

Strong, safe neighborhoods; Living green and working green; An energized downtown; Job creation and retention. These goals guide the City's budget and operations. Its Energy & Sustainability Initiative has helped make Knoxville a greener city by embedding support for low-impact design and alternative transportation options into how it designs and manages public infrastructure, and integrates sustainability principles into street design, utility infrastructure planning and maintenance. The City is implementing sustainable development strategies such as: the Solar America Cities Program; Leadership in Energy and Environmental Design (LEED) certification for the new Downtown Transit Center; energy efficient building practices for low-income housing programs, and more. Wherever possible, existing utilities serve new facilities. As derelict buildings are demolished, the practice is to recycle demolition materials whenever possible so that useable materials are recovered rather than transported to a demolition landfill. The preferred cleanup alternative calls for the existing structure of our target property to remain intact, but should demolition be necessary for redevelopment, demolition materials will be reused or recycled whenever possible, as advocated in City policy.

ii. Integrating Equitable Development or Livability Principles (3 points)

The City has embraced the six livability principles established by The Partnership for Sustainable Communities and set up specific programs and/or plans to further equitable development. In 2015, City officials hosted representatives from Smart Growth America to introduce concepts related to transit oriented development, which ties into the renovation of Downtown North into an integrated mixed-use area with visual, pedestrian, vehicular and land use connections working together. Connecting currently disconnected

streets and enabling pedestrian, cycling, and public transit options for access to employment, schools, and shopping will decrease vehicular miles traveled, thus reduce greenhouse gas emissions and benefit health.

Knoxville's housing programs target improvement and construction of affordable housing, homebuyer assistance, and repair and rehabilitation to reduce the number of substandard rental and owner-occupied properties. Components are: Downpayment Assistance Program - through federal grant funds, the City supports new construction and rehabilitation projects for affordable housing; Owner-Occupied Home Rehabilitation - funds are available for owners to rehabilitate substandard residential properties; Rental Rehabilitation Program - provides assistance to owners of substandard rental property. In return, property owners agree to long term rent and occupancy restrictions to keep the housing affordable to lower-income tenants; Blighted Property Redevelopment Program - provides short-term development and construction financing through subsidized loans to redevelop and renovate unoccupied residential dwelling units.

The City's Equal Business Opportunity Program is an outreach program aimed at increasing minority, women, and small businesses' participation in the City's procurement process for construction, goods and services. Every effort is made to encourage disadvantaged businesses to provide services on City projects.

Three Rivers Market, Knoxville's Community Food Co-op, is a customer-owned cooperative, and center of sustainable commerce that benefits members and the community by creating and nourishing a healthier environment, healthier people, and a healthier community. It strives to provide the very best local, organic, and healthy food available. The Co-op represents a three-million dollar investment in a former abandoned facility within a half-mile of our subject site and within walking distance of low income neighborhoods. The City provided gap financing to relocate and expand the business.

c. Economic and Community Benefits (long term benefits) (5 points)

i. Economic or Other Benefits (3 points)

Economic benefits are being realized from new retail and commercial establishments that have turned former underutilized properties into successful business ventures and created employment opportunities for local residents. Those benefits will increase considerably when the Sanitary Laundry facility and other brownfield sites are cleaned up and become once again productive properties. An obvious benefit is the increased tax base for the City of Knoxville. A report titled *Reclamation and Economic Regeneration of Brownfields*, by E.P. Systems Group, cites a study of brownfield project economic features which found that cleanup costs averaged only 8% of total project costs, and each \$1 of public sector financing invested leveraged an additional \$2.48 in private dollars. The Development Corporation of Knox County estimates that 5-10 new jobs are created per acre of industrial property developed. The estimated 136 acres of developable brownfield properties in Downtown North, could lead to as many as 1,000 new employment opportunities for local citizens. An increase in employment generates an increase in spending. It means houses will be maintained which leads to money spent on supplies needed to make the improvements. It means disposable income to spend in retail establishments and restaurants in the neighborhood. It leads to neighborhood stability which is desperately needed in the Downtown North neighborhoods.

ii. <u>Job Creation Potential: Partnerships with Workforce Development Programs (2 points)</u>
Knoxville-Knox County's Community Action Committee (CAC) provides job training through its Workforce Connections, which is responsible for the development and operation of a variety of programs focused on employment assistance, related training and support. Of note are two programs that focused on environmental training. Eight unemployed workers were trained for 'green' jobs as weatherization auditors to perform energy audits of homes to find and correct deficiencies, e.g. sealing leaks around windows and

doors etc. Of the eight that were trained, five found permanent employment and two started their own businesses providing energy audits. The second training of note relates to the environmental cleanup of contaminated sites at the Department of Energy facilities in Oak Ridge, located 20 miles from Knoxville. Workforce Connections developed a program, conducted by the International Chemical Workers Union, to train environmental technicians in hazardous materials handling, Hazardous Waste Operator Training and Emergency Response certification, and Occupational Safety and Health Administration (OSHA) construction certification in asbestos, mold and lead. CAC is located in our target area and therefore well positioned to provide training to the underserved citizens of the Downtown North neighborhoods.

5. Programmatic Capability and Past Performance

a. Programmatic Capability (12 points)

The City of Knoxville's Office of Redevelopment employs a full-time Director of Redevelopment who is assisted by a Deputy Director and project management staff. The Deputy Director is Ms. Anne Wallace who has managed, and is currently managing, multiple community redevelopment projects. Ms. Wallace oversaw all technical, administrative and financial requirements of two recently-completed \$400,000 Community-wide Brownfields Assessment Projects funded by the EPA - the Knoxville South Waterfront and Downtown North. Ms. Wallace coordinated with the City's Law Department to develop an access agreement for Brownfields property owners, and with the Finance Department to facilitate drawdown of grant funds. She reviewed and approved all EPA-required reporting and all community outreach communications. Ms. Wallace maintained constant contact with the environmental consultant to remain fully engaged in every task associated with the projects. Under her management, both projects were successfully completed, and redevelopment is happening in both project areas – the South Waterfront is undergoing a very large, mixed-use development of the three-mile waterfront with approximately \$185M in private investment, while Downtown North is seeing infill development of specialty retail and commercial businesses in keeping with the character of the neighborhood. Ms. Wallace has been an invited speaker to give presentations on these project successes at several environmental conferences and workshops. She will manage the cleanup of the Sanitary Laundry property. The entire Redevelopment Office staff becomes involved in the various projects so that each is familiar with the project goals and milestones. If employee turnover should occur, another staff member will be knowledgeable enough to fill in until a replacement can be found. While Ms. Wallace will manage the project, the design and implementation of the appropriate remediation system will be contracted out to a qualified environmental consultant and contractor. The City has a standard procurement process in place through the City's Purchasing Department to hire the best qualified environmental consultant. The procurement includes a Request for Qualifications published in the local newspaper and on the Purchasing Department's website, a thorough panel review of all submitted qualifications packets, candidate firm interviews if appropriate, and subsequent contract negotiations.

b. Audit Findings (2 points)

The City of Knoxville has been the recipient of multiple federal and state grants which it has administered successfully. The City's Department of Finance maintains strict adherence to grant compliance procedures so that all funds were drawn down and there were no adverse audit findings.

c. Past Performance and Accomplishments (6 points)

i. Currently or Has Ever Received an EPA Brownfields Grant (6 points)

1. Compliance with Grant Requirements (3 points)

In 2009, the EPA selected the City of Knoxville for a \$400,000 community-wide hazardous substances and petroleum grant for the South Waterfront Redevelopment Area. The Work Plan consisted of five major tasks which proceeded smoothly and successfully so in 2011, the City was awarded an additional \$400,000

in EPA Assessment funds for a community-wide hazardous substances and petroleum grant in our target area of Downtown North. This Work Plan had four major tasks: (1) Project Management and Reporting; (2) Public Involvement and Engagement; (3) Site Inventory and/or Characterization; and (4) Cleanup Planning and Institutional Controls. EPA tagged the Downtown North grant to the South Waterfront grant so both were ongoing at the same time. Both projects were completed within the allotted performance period. All grant compliance activities were completed on time including quarterly reports, MBE-WBE reports, and ACRES online database reporting. All field work was completed, all reports finalized, and all relevant data entered into ACRES prior to the grant closeout deadline of September 30, 2014. All deliverables (Phase I & II Reports, QAPPs, Asbestos/Lead Based Paint Reports) were sent in electronic format to EPA and TDEC. In addition, all deliverables were sent to the EPA Project Manager as hard copies. Approximately \$4,200 of the \$800,000 grant funds were not drawn down.

2. Accomplishments (3 points)

South Waterfront Brownfields Assessment – An inventory of potential Brownfield sites was conducted. Thirty hazardous substance sites and twenty-one eligible petroleum-contaminated sites were considered for evaluation. After careful evaluation of each site's redevelopment potential, twelve were identified as the best candidate sites for redevelopment including six parcels that comprised the former Baptist Hospital campus. After negotiations with the property owners, Phase I ESAs were conducted on the twelve sites and subsequently, seven Phase II ESAs were performed. Of those seven sites, one is part of a new riverfront road construction, one is an extension of the Cityview Riverwalk whose construction is now complete, two are being marketed for development and the final three are former Baptist hospital parcels. The former hospital is currently undergoing redevelopment into restaurant, retail, office, commercial and residential use with a public plaza – a \$165M private investment. Regal Entertainment has also just announced that it will locate its new corporate headquarters on a portion of the former hospital site. Throughout the duration of the Brownfields Assessment project, the City published a quarterly newsletter updating area residents on all of the redevelopment activities proposed or happening on the South Waterfront.

<u>Downtown North Brownfields Assessment</u> – Prior to receiving the Brownfields Assessment Grant, the City had conducted an inventory of potential Brownfield sites that identified 80 Brownfields properties. Sixteen were considered as having the best redevelopment potential and after property owners were approached for access, seven Phase I and six Phase II ESAs were performed. Sanitary Laundry was one of the sites. Of the six sites assessed, one is currently being redeveloped into 100 units of independent living for senior citizens, one has been purchased by a local businessman for future mixed-use development and the remaining four are ready to be marketed for redevelopment. Quarterly update meetings were held in the neighborhood for the Brownfields Project Team and the public. A quarterly newsletter was distributed to local library locations and via email to interested citizens, as well as being posted on the City's website.

When a property in either South Waterfront or Downtown North was identified for assessment, it was entered into the ACRES database which was updated at project milestones. At the time of grant closeout, all relevant information pertaining to every property assessed was up-to-date. As further work is performed at the assessed properties, the ACRES database will be updated to reflect the progress.

<u>In conclusion</u> -- As this former Sanitary Laundry and Dry Cleaning property and other Brownfields properties are returned to productive use in the community, job opportunities will become available, income levels will rise, property values will increase, and the environmental health and dignity of the neighborhood will be restored. None of this will happen overnight, but it will happen -- by focusing on our Downtown North Brownfields Redevelopment Plan, one property at a time.